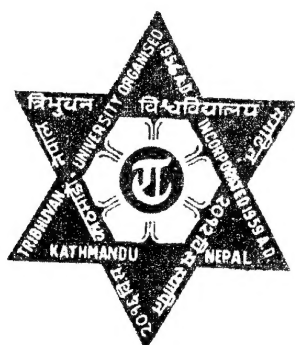


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**CONTRIBUTIONS
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A Preliminary Study of the Private Sector of Nepal's Manufacturing Industry

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Introduction

Nepal has now entered its fourth decade of 'planned development' begun in 1956 with the launching of its 'First Plan' which, like all subsequent 'Plans', it should be noted, was contingent on foreign aid. One consequence of Nepal's dependence on foreign aid for its industrial development in particular is that machine based manufacturing, at least up to the latter half of the 1970s, has tended to be the preserve of the government, even in those fields of manufacturing usually associated with the private rather than the public sector of production, leather footwear, for example.¹

The insignificant role played by private capital in Nepal's industrial development such as it was up to the mid 1970s, is outlined by Stiller and Yadav (1979:152-55) and in detail for the Central-West region of Nepal by Blaikie, Cameron and Seddon (1980:188:212). For the subsequent period, the decade covering the late 1970s to the mid 1980s, scholars have had little to say on the matter. Yet, information recently published by the Department of Industry in Nepal suggests that private capital's level of participation may have reached a turning point in this period. The Department of Industry's publication reveals that all 79 'Medium' size manufacturing enterprises which were operating during 1980-1983 as well as 24 of the 36 'Large' established in this same period, were registered as "Private, Ltd." companies (1984:189). Given that officially 'Medium' refers to an enterprise with an investment between Rs 2 and 10 million in fixed assets (principally, machinery) and 'Large' refers to one with fixed assets in excess of Rs 10 million, then it might be claimed, albeit tentatively, that in the 1980s private capital's participation may be much more intensive than in the past.

Apart from the uncertainty concerning the magnitude of the private sector of Nepal's current manufacturing industry, there is also a great deal of uncertainty about the way this sector is constituted, since very little information is available in the current literature. As far as I am aware there is no published information about the owners of the enterprises, themselves. It is the general aim of this paper to outline in fairly broad terms some of the major components of the private sector as it was constituted in 1985.

The data upon which this paper is based were extracted from the 'licence' and 'registration' records held at the Department of Industry in November, 1985. Needless to say this data need to be supplemented by data that can only be obtained from the personnel of the

various enterprises involved, a task which is planned as part of the second stage of the research project. Nevertheless, it seems advisable to try to publish the results of this first stage of the inquiry in order to disseminate the information gathered, since there is so little available, on the subject in the literature dealing with the current situation of industrialisation in Nepal, as far as manufacturing is concerned.

In presenting the results of the present inquiry, the emphasis is on description and not to resolve theoretical issues that may be implicitly or explicitly raised by the data. Those issues, it is felt, may be more appropriately addressed once the second stage of the inquiry has been completed. This does not mean that no theoretical issues will be explored. It means, rather, that whilst they may be sometimes raised explicitly, they will not be elaborated on or argued to their logical and sociological limits.

MAIN RESULTS

The Magnitude of the Private Sector

The records at the Department of Industry revealed that in November 1985 there were 544 operating industrial enterprises in Nepal, each with fixed assets in excess of Rs 200,000. Another 204 have applied to be licenced but these were not as yet registered as operating enterprises. Applying the criteria used by the Department of Industry and endorsed by the Industrial Enterprises Act, 1981, the 544 industrial concerns which were operating in 1985, were classified in terms of size, 'small',² 'medium' or 'large' and in terms of whether they were government owned ventures (public sector) or privately owned (private sector). The resulting pattern is presented in Table 1.

Table 1: *Size of Enterprise*

Sector	Small (n=304)	Medium (n=196)	Large (n=42)	Total (n=542)*
Private	99.3	94.9	64.3	95.1
Public	0.7	5.1	35.7	4.9
Total	100.0	100.0	100.0	100.0

*Information on level of investment was not available for two enterprises both belonging to the private sector.

On the basis of this pattern of results, there can be little doubt that in 1985, the magnitude of the private sector's participation in industrial manufacturing outstrips that of the public sector. In view of the fact that in the past, the private sector has tended to be dwarfed by the public sector, as noted earlier, then the changes in that

relationship must be a fairly recent phenomenon - exactly how recent is revealed in Table 2.

Table 2: *Size of Enterprise in the Private Sector*

Period when enterprise was registered	Small (n=302) %	Medium (n=186) %	Large (n=27) %	Total (n=515) %
Before 1975	42.7	22.6	11.1	33.8
1975 - 1980	35.1	16.1	22.2	27.7
1980 - 1985	22.2	61.3	66.7	38.5
Total	100.0	100.0	100.0	100.0

It can be readily discerned from the figures in Table 2 that two-thirds of the enterprises were registered during the period 1975-85 and more tellingly that a very high proportion of 'Medium' (61.3%) and an even higher proportion of the 'large' (66.7%) were in fact registered between 1980 and 1985. Therefore, not only is the level of private capital's participation significantly higher today than it has ever been in the past, but also, its entry at this relatively high level of investment has occurred most dramatically during the 1980s. But in which particular fields of production are the enterprises of this sector engaged?

Main Fields of Production

The records revealed that there were 127 different commodities being produced by the public sector of manufacturing during 1985. For the purposes of crosstabulation, these have been classified into seven broad categories of commodity production;

1. 'food and drink';
2. 'garment';
3. 'building construction';
4. 'household durables';
5. 'health';
6. 'education';
7. 'miscellaneous'

The proportions of each of the different size enterprises engaged in these seven fields of production are given in Table 3.

It appears that just over three-quarters (77.2%) of the enterprises were engaged in producing commodities falling into one or other of three categories 'food and drink', 'garment' and commodities used in 'building construction'. Moreover, 82.2% of the 'large' enterprises

and 82.3% of the 'midimum' were operating in these three fields of production. Of the 'large' enterprises, one-third are engaged in producing commodities aimed at the 'building construction' market whilst the highest proportion (30.1%) of the 'medium' size concerns were engaged in garment manufacturing and of the 'small' businesses the highest proportion (37.8%) was producing for the 'food and drink' market.

Table 3: Size of Enterprise

Field of Production	'Small' (n=302) %	'Medium' (n=186) %	'Large' (n=27) %	Total (n=515) %
Food and drink	37.8	29.6	22.3	34.0
Garment	16.2	30.1	29.6	21.9
Building construction	19.5	22.6	33.3	21.3
Household durables	5.0	3.2	3.7	4.3
Health	5.6	4.8	0.0	5.0
Education	3.0	2.2	3.7	2.7
Miscellaneous	10.6	5.9	7.4	8.7
No. Information	2.3	1.6	0.0	2.1
Total	100.0	100.0	100.0	100.0

If it is assumed that entrepreneurs respond to market demands or to the particular opportunities that these demands proffer, then perhaps, the burgeoning of the tourist industry and the internal migration of populations from the rural to the urban centres such as Kathmandu that have accelerated since the mid 1970s, may be seen as important factors propelling private capital in the production of commodities for the 'food and drink', 'garment' and 'building construction' markets. However, in the case of 'garment' production there is an additional factor especially since garment manufacturing is largely a post 1980s phenomenon since the great majority of 'medium' and 'large' enterprises of the private sector, as we have already seen, were established in this particular period. In this instance the additional factor is not one emanating from within Nepal but outside it. During the period in question India had imposed quotas on exports of garments. To short-circuit this constraint, some Indian entrepreneurs, according to some of my Nepali informants, have taken advantage of the fact that Nepal does not impose such quotas and are therefore producing in Nepal for export purposes. The extent to which this has in fact occurred is not known but its occurrence would help to explain the emergence of 'garment' manufacturing in Nepal as an industry of such magnitude during the 1980s. Moreover, if the Indian situation is a major factor then this avenue of private capital's speculation is highly precarious from the point of view of those Nepalese entrepreneurs that may be involved.

From a theoretical point of view, the case of 'garment' manufacturing may be seen as a particular instance which supports Blaikie, Cameron and Seddon's (1980) 'Centre/periphery' thesis but this cannot be asserted conclusively in the absence of any firm evidence that it is primarily Indian private capital that sponsors the 'garment' industry in Nepal. We shall return to this issue later. In the meantime, let us continue to sketch the general outline of the Nepalese private sector of industrial manufacturing. The next point we might consider is its profile in terms of the Nepalese forms of ownership, or 'legal status' of the firms involved.

Form of Ownership or 'Legal Status' of Enterprise

A privately owned industrial concern in Nepal may be registered in one of three categories, designating the legal status of that enterprise 'Private Ltd. Company,' 'Partnership' and 'Sole Proprietor.' The pattern of distribution of these three forms of legal ownership among the three different categories of size is shown in Table 4.

Table 4: Size of Enterprise

Legal status of enterprise	Small (n=302) %	Medium (n=186) %	Large (n=27) %	Total (n=515) %
Private Ltd. Company	87.0	76.9	96.3	83.4
Partnership	1.7	8.6	3.7	4.3
Sole Proprietor	10.3	14.5	0.0	11.3
No information	1.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

The private sector of manufacturing, it is evident from the results in Table 4, is 'company business', so to speak. In a caste society like Nepal, one wonders whether co-owners of the same company are of the same caste (or in contemporary official terminology of the same ethnic group)? There is also another but theoretically sound reason to explore this question.

Since the growth of the private sector of manufacturing is a very new phenomenon, as we have shown, and this 'new born' wealth is organized principally in the form of 'company', then what we may be witnessing is the formation of private industrial capital of some magnitude, or, to put it differently, the emergence of a 'new' class in Nepal, the owners/ controllers of this newly formed industrial capital. Therefore, to identify the caste/ethnic composition of this 'new' class is important from the point of view of theories about development/under-development such as the 'dependency' theory that has already been

applied to Nepal (see Blaikie, Cameron and Seddon, 1980) but which does not cover the period in question, post 1980. Now, to turn to the empirical evidence relating to this issue.

The Caste/Ethnic Composition of the Owners of Companies

The relevant information pertaining to the question in hand is given in Table 5.

Table 5: *The Caste/Ethnic Composition of the Owners of Companies*

Co-owners of Same Caste/Ethnic Origin	Private Ltd. Companies (n= 434) %
Parbatya (Brahmin/Chettri)	34.0
Newar	18.2
Tribal	4.4
Marawari	17.0
Indian (unspecified)	4.4
Co-owners NOT of same Caste/Ethnic origin	23.0
Total	100.0

It appears that it is only in 23.0% of the cases that we find co-owners of the same company not sharing a common caste/ethnic background, whereas this is not so for the great majority of cases. It would seem, therefore, that caste/ethnic compatibility between co-owners of a company is a major principle underlying the organisation of private industrial capital in Nepal. That co-owners of a company should appear to be concerned about caste/ethnic boundaries poses an interesting theoretical problem, since the context involved is one in which, it is generally presumed, the 'profit motive' would dominate. Be that as it may, the pattern of results points to yet another significant aspect of the social composition of what we have labelled Nepal's 'new' class.

We should note that just over one-fifth of the companies (21.4%) are owned by persons (co-owners) who are located outside the Nepalese caste system. Here, it is the Marawari co-owners who dominate (17.0% of all the companies are owned/controlled by co-owners of this particular ethnic group). Moreover, if we take into account the number of companies wherein co-ownership is heterogeneous in terms of caste/ethnicity but in which at least one of these co-owners of a company is a Marawari then the Marawari presence in this 'new' class is augmented by Marawari part ownership in 59 other companies. In addition, 20 of a total of 58 enterprises registered under 'sole proprietorship' are also owned by Marawaris. This means in effect that in approximately 30.0% of all the enterprises (irrespective of legal status) involve a Marawari ownership - whole or in part.

Given the relatively high representation of Marwaris in this 'new' class, it becomes important to study this ethnic group intensively and to monitor its industrial activities, for their entrenchment in this field may have economic, political and social implications for Nepal's future industrial development.

At this juncture, it is appropriate to consider whether the enterprises owned by members of the specific caste/ethnic groups may also be differentiated on the basis of broad fields of industrial production.

The Caste/Ethnic Dimension of Fields of Production

The relevant information concerning the relationship between field of production and caste/ethnic composition of the ownership of each enterprise is contained in Table 6.

We have already noted that enterprises in the private sector are concentrated in three main fields: 'food and drink', 'garment' and 'building construction' commodity production and that the majority of 'medium' and 'large' enterprises are engaged in one or other of these three fields of production (see Table 3). We also noted earlier, that the ownership of a significantly high proportion of these enterprises was vested in the ethnic group, Marawari, which is located outside the Nepalese caste system (see discussion on Table 4 and Table 5). Against that general background we postulated earlier that the emergence of 'garment' manufacturing as the second main field of production during the 1980s may be due to the presence of private capital owned/controlled by ethnic groups standing outside the Nepalese caste system. The evidence presented in Table 6 provides further grounds for advancing the general proposition that the 'new' class in Nepal is significantly 'foreign' (that is outside the Nepalese caste system) in its social composition and that this is most clearly evident in the field of 'garment' manufacturing.

Table 6 reveals that whilst 77.2% of all the enterprises are engaged in commodity production related to the fields of 'food and drink', 'garment' and 'building construction', significantly higher proportions of the Marawari and 'Indian' owned firms are engaged in these fields (81.0% and 89.0%, respectively). In contrast of the firms owned by indigenous Nepalese caste/ethnic groups, it is only among those owned by Tribals that we find a level of participation which rivals either that of the Marawari or Indian owned firms (95.7% of the Tribal owned firms are engaged in one or other of these three fields of production). However, Tribals own the smallest number of firms, 23 of the total 517, it should be stressed. Focusing on 'garment' manufacturing, we find that only the proportions of enterprises owned by Marawari, Indian and 'mixed' caste/ethnic groups exceed that of the proportion of the total enterprises engaged specifically in garment manufacturing - 21.9% of the total of 517 enterprises are so engaged, whereas 24% of the Marawari, 32.0% of the Indian and 27.5% of the 'Mixed' (caste/ethnic group) owned enterprises were operating in this particular field of

production. If we recall that more than half of the enterprises with a 'mixed' caste/ethnic composition of ownership involve Marawari ownership then we might claim fairly confidently, that not only is 'garment' manufacturing predominantly 'foreign' in its ownership profile but also, that it is essentially a Marawari enclave. This suggests that at least in the area of 'garment' production, industrial development sponsored by private capital in Nepal may be tied to the interests of private capital in India.

For historical, geographical, political and other considerations, the preserve of Marawari and other Indian entrepreneurs in Nepal has been contained in the highly fertile area known as the Terai, bordering India. Whilst this may hold as far as entrepreneurial activity based on agricultural production, it may not necessarily apply in the case of entrepreneurship involving the industrial type of production being examined here. This constitutes the final issue I want to address using the data extracted from the records held at the Department of Industry.

The Regional Distribution of Enterprises owned by the various Caste Ethnic groups

The information relevant to our topic is presented in Table 7.

Whereas just over half of the enterprises were located in the Central Development Region (51.1%), a significantly higher proportion (70.1%) of the Newar owned concerns were located there. This is not surprising since the Central Region incorporates Kathmandu Valley where in the capital or the largest and fastest growing urban settlement in Nepal is located and therefore presents the major domestic market for the commodities involved and is as well, the ancestral homeland of the Newars, so to speak.

What is somewhat surprising, is that such a high proportion (45.7%) of the Marawari owned enterprises should be located in the Central Region - a far larger proportion than for any other group bar the Newars and the 'Mixed'. More than half of the latter, it should be recalled, involve a Marawari as a co-owner. Therefore, the Marawari presence in this Region in terms of ownership, is even more extensive than we might assume at first glance. Certainly, on the basis of the evidence presented in Table 7, it cannot be categorically maintained that the Marawari interests nor those of Indians, generally, are contained in the Eastern Development Region.

Whilst this is as far as the data from the records permit us to go in sketching the social anatomy of private industrial capital in Nepal, this exploration would be gravely inadequate if we were to say nothing about the labour power that this newly constituted industrial capital commands. If as I have tried to argue, the owners/controllers of this industrial capital constitute a 'new' class in this predominantly agrarian society, then this automatically entails the emergence of a 'new' working class, the industrial workers who provide the labour power for the industrialists.

Table 7: Caste/Ethnic Ownership of Enterprise

[illegible]

A 'New' Working Class

Unfortunately, information about the workers in each of the enterprises was not available in the records examined for this study. The Department of Industry, itself, relies on periodical sample surveys to obtain such information. This research method of obtaining information, as already stated, was not used for this stage of the present inquiry. But since the issue is extremely important, we might, with some caution, utilise the material, contained in the Department of Industry's publication (1984). In that publication the Department of Industry provides detailed information relating to labour on each of 155 non-government manufacturing enterprises operating during the fiscal year 1983/84. Although it does not relate specifically to enterprises in operation in 1985 but to the previous year, it may, nevertheless, be a useful starting point to explore the issue at hand.

First of all, the private sector as represented in the Department's survey, consists of:

- 94 (60.7%) 'Small'
- 52 (33.5%) 'Medium'; and
- 9 (5.8%) 'Large' enterprises.

This pattern of distribution in terms of 'size' is comparable to that based on all enterprises in this sector in 1985, as outlined earlier. Thus we may, perhaps, use the Department's survey data with some confidence for our purposes.

Focusing on the question of labour, we find that the private sector in 1983/84 employed a total of 31,222 persons. The way this workforce is distributed among the various size enterprises and in terms of the workers' national identity ('Nepalese'/'Foreign' can be seen in Table 8).

Table 8: Employees in Each 'Size' Enterprise

Nationality of Employee	Small (n= 6,964) %	Medium (n= 7,826) %	Large (n= 16,432) %	Total (n= 31,222) %
Nepalese	90.7	77.4	85.0	84.4
'Foreigner'	9.3	22.6	15.0	15.6
Total	100.0	100.0	100.0	100.0

As might be expected, more than 3/4 of this industrial workforce (77.7%) is employed by the 'Medium' and 'Large' enterprises. It is in these enterprises, however, that a significantly high proportion of 'foreign' workers are also found (22.6%, 'Medium' and 15.0% in

'Large', respectively). In contrast, 'Small' enterprises appear to employ a relatively small proportion of 'foreign' workers. Given that the majority of the 'Medium' and 'Large' enterprises in this sector are not located in the Terai and given that 'foreign' workers refers mainly to persons from India, then the 'new' working class would seem to be divided into major ways; first, its indigenous component is likely to be divided along caste lines; and secondly, its 'foreign' component would tend to divide the working class as a whole into two distinct National groups, Nepalese and Indian. How these divisions of the 'new' working class relate to corresponding divisions within the other 'new' class, that which owns/controls the factories, is an important question. But unfortunately it is an issue which we cannot explore empirically, since the caste/ethnic identity of the owners of these enterprises is not given in the Department of Industry's publication. Without this kind of information it is not possible to explore the very important topic of class relations in this very new Nepalese context. Further research in this field is necessary not only for theoretical reasons but also for policy decisions concerning Nepal's future pattern of industrial development.

NOTES

1. For an excellent assessment of other major consequences of foreign aid based planned development see Intergrated Development Systems (1984) and for detail account of development, generally, see Wake (1980). For an assessment of planning policies see Gurung (1985).
2. Definitions for 'medium' and 'large' have already been noted (see Introduction,). A 'small' enterprise is defined as one with fixed assets worth less than Rs 2 million but no less than Rs 2000,000.

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Palaeo-environment and Prehistory of Nepal

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The kingdom of Nepal, extended in the form of an elongated rectangle between the longitudes of 80°-15' and 88°-15' E and latitudes of 26°-15' and 30°-30' N, is bounded on the north by the Tibet region of the people's Republic of China and on the east, south and west by the Sikkim, West Bengal, Bihar and Uttar Pradesh states of India. The total area of the kingdom is 800 kilometres east-west and its breadth varies from 144 to 240 Kilometres north-south. Geographically, the country is in a privileged position. It lies in a temperate zone with the added advantage of altitude. Except the portion of Tarai, even the valleys, with some exceptions, are nowhere less than 1275 metres above the sea level.

Watered by the Kali, Karnali, Bheri, Seti, Rapti, Gandaki, Bagmati, Kosi and Mechi rivers and their numerous tributaries and decked with a large number of glacial-empounded lakes, the land of Nepal has been divided into five geographical zones namely the Tibetan Tothys Zone, Himalayan Gneiss Zone, Main Central Thrust Zone, Midland Zone, Mahabharata zone and Siwalik Zone (Arita 1982:5-29). The formation process of the Himalaya Mountains signify a most exciting crustal movement producing the biggest upheaval on the surface of the earth. The movement started in the tertiary period and accelerated through the quaternary: the rate of upheaval for these highest mountains in the world being for greater than other mountain ranges (Kizaki 1982:1). Many of the tertiary deposits were raised as foothills and they have been extensively identified and dated by palaeontological evidence. It is here in the Siwalik strata that the extra-ordinarily interesting primates *Sivapithecus* and *Palacosimia* were discovered. The latter appears in the line of orangutan while the former has some relation with the fossil primates grouped in the family of *Dryopithecidae*. This family is famous for its particularly hominid-like teeth, suggesting that it has a definite relationship to human evolution (Sharma 1984:26-27).

Till 1950 no substantial geological studies could be made in the kingdom of Nepal. First geological study of Nepal Siwaliks was made by Auden (1935:123-167) and then by Lombart (1952:46-49) who have only briefly discussed its formation. In 1959 Toni Hagen minutely studied the cross-sections of the Siwaliks and noted three-fold stratigraphic division in its formation. He is of the opinion that most of the exposed Nepal Siwaliks are Middle Siwaliks (Hagen:1969). After Toni Hagen a large number of geologists have studied the Siwaliks and even reported of the fossil remains from there. Their study reveals that the Siwaliks of Nepal possess the same characteristics which have been noted in case of the Kashmir and Punjab Siwaliks by the geologists (Sharma 1984:26-27).

Since 1962 the Tethys Society and various universities of Japan have conducted fruitful geological investigations of the Nepal Himalayas and some of the main achievements of their survey have been published in two Special Issue Volumes of the Journal of Nepal Geological Society respectively in 1982 and 1984. Under the same project during 1980-81 study of the crustal movements in the Nepal Himalayas was also undertaken by them. Their studies has revealed considerable knowledge on the nature of the rocks and terraces of the rivers which flow in the different regions of the kingdom.

A study of the terraces of the Bagmati river by Yoshida and Igarashi reveals that fluvial and lacustrine sediments distributed in the Kathmandu Valley (circular in outline having diametres of 30 km. in EW and 25 km. in NS direction) are divided into eight stratigraphic units in ascending order. According to them the Lukundol formation is of pliocene to early pleistocene period and the southern area of the valley adjoining the Mahabharata mountains was created on account of an upheaval in early to middle pleistocene period after the Lukundol formation. The radiometric dating, palaeomagnetic measurement and pollen anylisis of the data reveals that Gokarna, Thimi and Patan deposits correspond to last glacial approach (Yoshida and Igarashi 1984:73-100). Thus, the basin which developed in the early pliocene period remained in the form of a lake till the last phase of the quaternary period. In the middle to late pleistocene period the old Bagmati river cut the ridge of the southern mountain and flowed out southward (Yoshida and Igarashi 1984:73-78).

The Gokarna formation consists of laminated arkosic sand, silty clay and peat, grey or dark brown in colour and has yielded carbonized fossil wood (Yoshida and Igarashi: 1984:79). The Thimi formation (i.e. the area of Pasupatinath, Tribhuvan Airport, Thimi, Bhaktapur and South Patan) consists of fluvio-lacustrine sediments, arkosic sand, silt, clay and gravel layer, grey to light-brown colour. The gravel is mostly composed of granite, derived from the northern mountain region (Yoshida and Igarashi: 1984:80). The Patan formation distributed around the Patan and Kathmandu cities contains the same sediments which have been noticed in case of the Gokarna formation but it is of the later date, i.e. of middle pleistocene period. The lower terraces distributed along the Bagmati river at the height of 5 to 15 metres above the recent flood plain consist of mainly micaceous sand and pebble to granude gravels (Yoshida and Igarashi 1984:74-80). The radiocarbon ages of Gokarna, Thimi and Patan formations from different localities range between 29390±2660 — 24420 ± 1960, =2040

33200 ± 3400 - 23390 and 18970 ± 1480 - 11070 ± 290

years B.P. The pollen analysis of the samples taken from various places indicates that pine, oak and alder abundantly grew alongaide spruce, fir and homlock. The pollens of *Pediastrum borianum*, which are usually found in lakes, ponds and rivers have been also found in plenty (Yoshida and Igarashi 1984:87-95) which confirm the statements of the earliest chronicles of Nepal that Kathmandu Valley was lake in the beginning (Wright 1958:45-63). While talking about the animal fossils, West and

Munthe have written that "freshwater invertebrates are frequently found in the stream cuts south of the Chaubhar Gorge alongwith fish scales. The most interesting fossils yet reported from the Kathmandu Valley are a few well-preserved vertebrate specimens which have been recovered from the clays and lignites along Nakhu Khola" (West and Munthe 1984-85:103). A tooth of *Stegodon*, a fragment representing *Crocodylus* and a fragmentary tooth of *Elephas planifrons* and *Hexaprotodon silvalensis* have been found, but considerable searching has failed to reveal additional large vertebrate fossils. The two proboscideans, together with the hippopotamus and crocodile, provide evidence for a very wet environment. "It is possible to visualize the Kathmandu valley in early pleistocene time, some 1.5 million years ago, nearly filled by a large lake with well-forested shorelines providing a suitable environment for many species of large mammals" (West and Munthe 1984-85:103).

The studies of Yoshida and Igarashi also reveal that the climatic environment of the Kathmandu Valley at the time of the Lukundol formation or early pleistocene period has been "relatively mild and/or warmer and moister than that of the present, although containing a cool spell. Afterward the climate changed drastically in the Gokarna formation period from mild and moister to cold and drier" (1984:73-95). The Patan formation was deposited in the late stage of Main Wurm with its cool condition (1984:73-95). The pollen grain analysis elucidates that at the time of the Lukundol formation period tropical evergreen upper montane forests, Gokarna formation period temperate coniferous forests and Patan formation period tropical evergreen montane forests grew in the Kathmandu Valley. The Lukundol formation has been correlated to the pliocene to lower pleistocene Karewa formation in the Kashmir Basin and Siwalik group. The Lukundol fauna corresponds to the *Elephas planifrons* Internal-zone of the Siwaliks of Potwar Plateau belonging to middle pleistocene period (Yoshida and Igarashi 1984:87-94).

The Karewa deposits and Potwar Plateau have been minutely studied by the geologists and archaeologists. Their studies reveal that throughout the pleistocene period man had lived in this region and made lithic tools for his persistence (Krishnaswami 1978:11-58). In the Kathmandu Valley also prehistoric survey has been conducted and tools from Gokarna and Dhobi Khola, i.e. Thimi formation period have been collected on the river terraces and the beds, indicating that as in the Punjab and Kashmir Valley in Nepal also man lived and hunted animals in the style of the savage men of the other parts of the world. Schetenko is of the opinion that the tools of the Dhobikhola of the Kathmandu Valley are similar to those of Mongolia, China and Soviet Premorye and can be dated back to 30 millennium B.C. (1978:1-2). This reminds the present researcher of Chinese geologist Chen Wanyong who has advanced the theory that "in the pliocene period the Himalayas were about 1000 metres above sea level" only and, that is why, they did not deter the movement of the mammals from one direction to other and the monsoon from the South Indian Ocean as they do it today owing to their enormous height (Sharma 1984:29-30). After the pleistocene glaciations and interstadials when temperate climate started, neolithic revolution commenced in the Kathmandu Valley

as in the other regions of Nepal. This fact is attested by several neolithic finds from the valley (Sharma 1983:1-12).

The river Kali-Gandaki and its tributaries, which flow in mid-western Nepal, have been extensively studied by the geologists. According to them the Pokhara Valley spread around the Seti river is filled up with a large volume of gravel deposits, mostly from Annapurna Mountain, and presents splendid terraces for the study of the quaternary geology. Hagen has forwarded the theory that like the Kathmandu Valley once the Pokhara Valley was a single huge lake but the recent studies of the geologists revealed that only marginal lakes were formed due to the damming of tributaries there. The quaternary deposits overlie the Midland Meta-sediments and are divided into nine stratigraphic units called Begnas, Siswa, Tallakot, Ghachok, Phewa, Pokhara and Rupakot formations. Of these the Pokhara formation is constituted of fluvial gravels accumulated by the Seti river and lacustrine deposit interfingering with the gravels. Hormann is of the opinion that Pokhara formation took place during the last glacial ages whereas the Rupakot terrace was formed in the post glacial period (Yamanka and others 1982:113-42). In the month of March of 1986 the present researcher collected some tools from the Pokhara formation which are similar to those of Kangra and Guler. At Kotre even a neolith was found which shows that after the glacial period was over, neolithic men occupied the Pokhara Valley for their habitation. The Phewa and Rupa lakes indicate that the neolithic people of the Pokhara Valley widely ate fish of these lakes.

The studies made by Yamanka, Yoshida and Iwata of the terraces of the Thakakhola in the neighbourhood of Muktinath, Kagbeni and Marpha reveal that they were formed during the late pleistocene period (1982: 81-94). No evidence of early man has been found from there so far. The terraces along the Kali-Gandaki and Marsyangdi rivers of Central Nepal reveal the same story. They are also of tectonic origin and quaternary period (Yamanka and Iwata 1982:95-111). The human skeletons, bone arrow-heads, channel-spouted bowls, shell-ornaments and copper implements including anthropomorphic figures of the Thakakhola region reveal that during the early neolithic and chalcolithic periods this region was an important area of human activities (Tiwari 1985:1-12). The neoliths of Charikot also provide testimony to this fact (Sharma 1983:1-12).

The study of the Siwaliks and Dang and Chitwan valleys reveals that since the beginning of the quaternary period man was quite instrumental in the lower Himalayan region. The lower, middle and upper formations of the Siwalik in and around the western part of the Chitwan Valley are roughly correlatable to lower, middle and upper Siwaliks of India and Pakistan (Tokuoka and Yoshida 1984:63-72). Iwata and Nakata of Japan Metropolitan University have studied the river-terraces and crustal movement in the area around Narayanhata. They found four kinds of terraces namely the highest, higher, middle and lower. According to them the lower terraces were formed during the holocene period and the highest and higher in the pre-last interglacial time. The middle terrace groups correspond to the last glacial and/or interglacial period. Main aim of Iwata and Nakata was to study the crustal movement of the area

(1985:33-42) and, therefore, they did not care to explore the archaeological potentialities of the locality.

In the winter of 1968-69, N.R. Banarjee and J.L. Sharma carried out the prehistoric study of the terraces of the Gandaki river, locally called Marayani in Nepal, in the Navala-Parasi district between Tribeni Ghat and the Siwalik Mountain. Between Ratanpur and Pithaunji Ghat they found a succession of 5 terraces. At Danda in the loosened gravel of the fifth terrace they discovered some handaxes, cleavers, choppers and serapers of quartzite. Most of them have got calcareous outer skin of 'whitish appearance'. The tools were not in situ. Although much rolled up they do not show any patina on their body. Banarjee is of the opinion that the southern part of Nepal, particularly the upper terraces of the major rivers, were the habitat of the prehistoric man during the quaternary period (Banarjee 1969: English Section 6-9).

The land stretched between the Ramdikholra and Butwal is important both for the anthropologist and archaeologists. Sakai and Yoshida have extensively studied the stratigraphy and palaeomagnetism of the Tansen area in this region (Sakai 1984:41-52). Here near the Tinau Khola, only a few kilometres to the north of Butwal, Hutchinson, a member of Joint Nepal -- U.S.A. Scientific Expedition Team, found the left upper molar of the hominoid *Ramapithecus*. The palaeomagnetic analysis of the rocks from where this tooth was found revealed that Butwal *Ramapithecus* lived in the Siwaliks of Nepal about 11 million years ago. *Ramapithecus* is the earliest fossil primate. Many anthropologists believe that he is the first 'direct ancestor of man' in Asia (Sharma 1984:25). Along with the upper left molar of the *Ramapithecus* a large number of fossil remains of fish, crocodile, elephant, etc. were collected by Jens Munthe and his wife of the expedition party. The tooth and other specimens found in the neighbourhood of Butwal in the same stratum of rock throw immense light on the environment of the Siwalik man (Banarjee 1969:6-9).

The geology of far-eastern and far-western Nepal is very little studied so far. Both the regions abound in the valleys of fluvio-glacial and lacustrine origins of pliocene to pleistocene periods. The valleys of Surkhet and Dang are very significant from the view-point of palaeoenvironmental studies. The present researcher himself collected some palaeoliths from the bed of Hapurkhola and a neolith in the fields of Katuki Sewar on a terrace of the tributary of the Babhai (Saryu) river in 1966 (Pandey 1983:55). These tools and the shouldered axes of the Surkhet valley from the Latikoili temple area reveal that throughout the quaternary and early holocene periods the Dang and Surkhet valleys were the habitat of man in Nepal.

During 1984-86, Gudrun Corvinus of Evlangen University, Germany studied the miocene-pliocene stratigraphy and geology of parts of Siwaliks and its palaeontological potentials in order to determine the age and palaeo-environment of the Siwalika group sediments with those known from Indian sub-continent and Pakistan. The same time she studied the pleistocene and early holocene periods also for ascertaining if Nepal had some settlements of palaeolithic and neolithic man. She

selected the road which was being built to connect the Dang Valley from Koilabas through the Deukhuri Valley. The exposed sections of the road during the cutting and blasting provided a number of vertebrate fossils in situ in the rocks, mainly in the compact sandstones which seem to constitute the middle part of the Siwaliks (Corvinus 1985:1-6). Also a very great amount of plant fossils, of leaf impressions and of fossilized, carbonized wood was found, the wood mainly in association with the vertebrate fossils in the sandstones, and the plant and leaf material throughout the succession, but more commonly found in the clastic deposits of clay-stones and mudstones in the older period. Besides these fossils a number of horizons full of molluscs could be recorded, which yielded plenty of gastropods and lamellibranches, sometimes so rich that they form lumachelle horizons in the clays. In course of her investigations near the Chorakhola bridge Corvinus found "a lonely set of animal footprints of some smaller antiodactyl animals" as well (1985:1-6). West and Munthe have written that Dang Valley has given the same fossil remains which have been noted in case of the Kathmandu Valley (1985:103-105). According to them the Dang Valley was a lake "approximately 2.5 to 1.5 million years ago", which corresponds to the geological time of latest pliocene and earliest pleistocene periods (Corvinus 1985:1-6).

The environment of the earlier period in the valley seems to have been quite. Below the Middle Siwaliks is the deposition of clay, silt and mud in quite waters" of small backwaters and marshy terrain" with small ponds and occasional fluvial intercalations, and with a greater wealth of plant life (Corvinus 1985:1-6). The middle part of the earlier period indicates "a wide flat riverine environment with a broad net of widely meandering and braiding streams and broad flood beds with ever changing points and traverse bars" (Corvinus 1985:1-6). The upper Siwaliks with deposits in the form of thick conglomerate banks presents a scenery which is characterized by large fans and sheets of boulder/cobble gravels at the foot of the mountains.

The researches in the Arjuna Khola between the Dang and Deukhuri valleys and between Nepalgunj and Surkhet valley provided the same kinds of material deposits and plant and animal life to the investigator, indicating the fact that the strip of Siwalik Mountain in Nepal had the same kind of environment everywhere between the Mechi and Mahakali rivers in the past. This fact is well confirmed by the concentrated survey of the Kamala river in eastern Nepal where a great amount of vertebrate fossils have been recorded in the sandstone deposits of the Middle Siwaliks along with many plant fossils, leaf-impressions and carbonized wood, as well as molluscs in some very concentrated horizons (Corvinus 1985:3). The most interesting discoveries of this area are the large animal fossils, some partly fragmented and some well-preserved skulls of crocodiles, large pig, antelope and elephant. One large elephant skull, which is almost complete and was taken out from the sandstone "seems to belong to a *Stegodon* and is probably of an Upper Siwalika age, comparable to the Pinjors in India" (Corvinus 1985:3). These discoveries give a clear picture of the palaeo-environment and palaeontology of the Siwaliks in Nepal from where a large number of lithic tools comparable

to the tools of Indian Siwaliks have been discovered by the archaeologists in their survey works. The researches of Gudrun Corvinus in the Dang and Deukhuri valleys attest that prehistoric man lived there at the margin of the formerly existing lakes which originated there when the rivers blocked due to the continuation of orogenetic movements after the forming of the Dun valleys. Prehistoric sites have been located in these valleys "and in association with a colluvial silt which form terraces in the Rapti and Babhai valleys and interfinger with fluvial and probable lacustrine sediments." (1985:5).

The environmental situation of the Tarai of eastern Nepal had been quite different. Here the sites are not connected with intermontane Dun valleys but located on the river terraces of the streams which leave the Siwaliks and enter the plains. In the flat plains of Tarai these streams contain riverine terraces at the edge of the mountains which were perhaps occupied by the stone age men in the style of the Sohan valley stone age people of India (Corvinus 1985:5). The study of the stratigraphy of the Sabhaya Khola in the Sankhuwa Sabha district, i.e. the mountaineous area of eastern Nepal, by Andrews reveals that it has the same mode of land-formation which are found in the localities of the Kathmandu valley and Nuwakot (1985:12-35). One jaw fragment of the hippopotamus *Hexaprotodon* found near Janakpur in south eastern Nepal is similar to those found in the Dang and Kathmandu valleys. This specimen shows that as in the Mid-lands, the Tarai region of Nepal was also occupied by the water-and-forest-living animals in the early pleistocene period (Corvinus 1985:5-6).

After a cursory appraisal of the palaeo-environment and geological data of the plio-pleistocene and early holocene periods let us now analyse the archaeological finds of the time for reconstructing the early history of man before the beginning of the historical period in the Himalayas of Nepal. It has always been a question of great interest to the archaeologists whether stone-age man did in fact live in Nepal. Several attempts were made in the past by the archaeologists in this regard. Toni Hagen, while studying the geology of Nepal Himalayas, noted that the caves and cave-shelters of the country were the abode of the earliest human beings about 7 million years ago. Now the discovery of a left upper molar of the *Ramapithecus* in Tinaukhola near Butwal elucidates that the belt of Nepal Siwaliks was occupied by the earliest ancestors of the men of Asia about 11 million years ago since now. The *Ramapithecuses* could walk erect, had the knowledge of fire and used spilt stones and wooden stick of the trees as tools for hunting animals. The bones of crocodiles and fish found in the bed rock of the molar tooth shows that they ate these animals in their diet. Janak Lal Sharma is of the opinion that when the Himalayas were not so high, the *Ramapithecuses* had their free movement from the region of the Siwaliks upto Central Asia (1984:25-31). That is why, Stechenko, who studied the prehistory of Nepal in association with Sharma, after the discovery of some tools in the Dhobikhola of the Kathmandu valley and the neighbourhood of the Danda river in the Navala-Parasi district, has written that the lithic complex of Nepal has some analogies in Mongolia, China and Soviet Premorye where gobien cores have also been found and can be dated back to 30 millennium B.C. (1978: 1-2).

R.V. Joshi of the Archaeological Survey of India conducted the prehistoric survey of the Kathmandu Valley in 1964 but he did not find any lithic tool in course of his exploration (Joshi 1966). In 1966-67 the present researcher for the first time discovered some stone tools in Nepal. Two of them, one an unifacial chopper of pre-Chellean type of quartzite from the neighbourhood of Danavatal, Bardia district, Bheri zone (Sharma V.S. 2039:Fig.2, Facing page 27) and the other a neolithic celt of phillyite from Katuki Sesar, Dang valley of Rapti zone (Banarjee and Sharma 1969:53-58, Fig. 1-9) of western Siwalik region are quite noteworthy at this place. In 1969 Banarjee and Sharma also discovered some tools from the neighbourhood of Danda of the Naval-Parasi district of central Tarai region (1969:6-9). After 1969 many scholars devoted their attention towards this field. Stecheneko and Gudrun Corvinus are quite significant among them. The former found out some palaeoliths and neoliths in the Naval-Parasi district and declared that the tools could be compared with those of Punjab and Kashmir in India and Pakistan (Corvinus 1985:7-12). The latter did not only collect palaeoliths and neoliths but also some microliths from the Deukhuri valley of Western Nepal. The prehistoric researches of the scholars mentioned in the foregoing lines show that throughout the quaternary and early holocene periods atleast the Siwalik and Mahabharata belts of Nepal were under habitation by the prehistoric men.

The palaeolithic industry which forms the archaeological data for the palaeo-environment of Nepal could be divided into three major groups namely palaeolithic, microlithic and neolithic-chalcolithic. The palaeoliths of Nepal are mostly choppers, handaxes, scrapers and cleavers of quartzite (Stechenko 1978:1-2, Banarjee 1969:6-9 and Corvinus 1985:7-12) of Sohanian type. The handaxes were used by the prehistoric men for grubbing up roots and tubers, cutting down trees and digging holes. Banarjee and Sharma have not given any illustration of their tools in their paper. Stecheneko has, however, given the photographs of a few tools of which the handaxes seem much rolled up and their pointed edge are also broken. The scrapers and choppers are in mint condition and their flake scars are clearly visible in the specimens (1978:1-2). The cleavers of Banarjee and Sharma show broad cutting edge formed by the intersection of two large flake scars inclined to one another at a small angle (1969:6-9).

At Dainaguan in the Deukhuri Valley, Gudrun Corvinus found an unifacial chopper of Sohanian type within a sub-recent reworked cobble gravel of the stream (khola) and it is covered with a lime crust. It has "a sharp edge of 70° in comparison to the almost 90° angles of side-scrapers, but otherwise is quite similarly fashioned on a quartzite cobble with the edge formed from a flat cortex surface of the cobble" (Corvinus 1985:11). The other palaeolith of Gudrun Corvinus is a hand-axe-like tool found near Ranigora in a gully, which had cut its bed into alluvial silts. It is much rounded and rolled up. The proximal part is broken away and existing distal part is well worked into a hand-axe like point (Corvinus 1985:11). Both the tools have been made from the pebbles of soft tuffaceous material, and, therefore, they are not

very much suitable for any work. Of this material a number of unifacial chopper/core-scrappers and flakes have also been discovered from Kurepani, Lamahi and Arjunakhola. These tools indicate that the prehistoric men had not only occupied the Dang and Deukhuri valleys but had penetrated into the Himalayan valleys via the heavily forested Siwalik mountains (Corvinus 1985:11). At this place it is significant to note that Gudrun Corvinus gives great credit to her discoveries and rejects the authenticity of the old stone age tools discovered by Banarjee, Sharma and the present researcher in the different localities of Nepal by announcing that Kathmandu and Chitwan valleys have "so far proved to be sterile" (Corvinus 1985:8).

In the Pokhara valley the present researcher discovered some tools of old stone age which have been made on block-and-block technique. At Batulichaur and Tulsiban some cleavers, side-scrappers, ovates and discoidal tools were also found by him. The unifacial choppers of Dulu-gaunda and Kotre remind one of the chopper-chopping industry of Guler in India. From the flat terraces of Gaganagaunda, Devies Fall and Damauli of the Rupakot formation period cleavers were also found and they reveal the prevalence of advanced tool technology in the proceeding phase. Even from the bed of the Karnali river near the Tikapur Camp of Western Nepal an unifacial chopper was picked up. One tool of the Chinchung Khola, Bheri zone, is fashioned in the Clactonian style with secondary chipping on the sides, indicating its retouching by the man who used it in his life. These old stone-age tools provide ample evidence in regard to the occupation of the Siwalika and Mahabharata mountain valleys of Nepal by the prehistoric communities since the very dawn of human civilization.

During the middle palaeolithic period the flakes which came out at the time of making choppers and handaxes were again retouched and used by men and thus originated the macro and micro lithic tools in Nepal in the proceeding phase. This fact is clear from the investigations of the Dang and Deukhuri valleys by the present researcher and Gudrun Corvinus. Prepared striking platform and concave or convex bulb of percussion are two notable features of such tools. Materially, typologically and functionally these tools are quite different from the tools of old stone age. The environment of the time played a great role in the evolution of these implements.

The microlithic culture of Nepal is represented by a variety of small flakes of chert, quartz and quartzite of which a lunate and a discoidal core from Lamahi, Deukhuri valley are of particular interest (Corvinus 1985:9). The tools of Chaupatta are similar in type but of macro-size. At Dainagoan of the Dang Valley large number of microliths made from chert, quartz, cristal quartz, quartzite, indurated shale and tuff were discovered by Gudrun Corvinus. She has given the photographic illustrations of 17 microlithic tools in Fig. 4 (a) and (b) of which 9 tools of Fig. 4 (a) are made from quartzite and are flakes with small, often prepared platforms. One can easily notice pronounced step-flaking at the edge of the platform on the dorsal face. The most dominant artefact among the microliths "is a cobble tool which had one unifacial, straight edge which is formed by steep primary, secondary and step

flakes taken off from a flat cortex plane of the cobble. This type of unifacial chopper or corescraper is found almost in every locality (Corvinus 1985:10). The tool has been made from a quartzite cobble. At Gidhnaniya in the Tui Khola Valley corescrapers, flakes, cores and waste pieces of quartzite have been discovered under the fluviatile cobbles and therefore their palaeolithic period is definite (Corvinus 1985:10-11).

In the month of April of 1986 some microliths were discovered from Surkhet and Dang valleys by a prehistoric survey team of C.N.A.S. Of them one side-scraper from Khorke Khola, made on a quartzite flake, is 10.5 cm long and shows two ridges on the front side while its dorsal part is flat. Several points were collected in course of the survey of which one point from the terrace of Sewar Khola is more like a burin and shows a ridge in the middle. The points of the Surkhet Valley and Tika-pur region are of oval shape and their pointed parts are often blunt. One 11.2 cm long point from the terrace of Kattukhola, Dang Valley should be taken as point-cum-side-scraper for its cutting edge on the side. Several sidescraper-cum-points, burins, notched points, asymmetrical points and blades of non-geometrical type were found at different places of the Dang and Surkhet valleys by the exploration team which attest that there is a distinct phase of microlithic culture in western Nepal during the middle palaeolithic period.

The evidence of neolithic culture is some what larger than those of the palaeolithic and mesolithic or microlithic. A large number of neoliths are reported from throughout the whole length and breadth of the kingdom. After the end of the glaciations in the early holocene period when modern flora and fauna grew on the surface of the earth, on account of a new kind of environment a new kind of human life started with permanent villages, domestication of animals and the use of pottery. This fact is proved even by the stratigraphical evidence of the country. The neoliths were used by the modern men for the purpose of deforestation and digging the fields and edible roots of the forests of their localities.

The neolithic culture of Nepal is so far represented by the surface collections from Charikot of the Dolkha district, Jugugaoan - Khopasi in the Kavare Palanchok district, the Chitwan, Dang, Deukhuri, Surkhet and Kathmandu valleys and Morang and Sunasari districts. The majority of neoliths of Nepal are cyclic and sub-rectangular axes with curved medial ground edges which correspond to the principle types of Assam, north-eastern India. They have been divided into three functional types called celts, adzes and chisels. Most of the neoliths of Nepal are in fairly fresh condition and some of them even today retain their sharp edges. The celts abound in them. Often they are small in size "round and cyclic in form and have bifacial working edges. The butt-ends are either rounded or flat. The medial cross-sections are mainly confined to two geometric forms, ovaloid and cyclic or sub-rectangular" (Sharma 1983:2).

The largest neolith is one which the present researcher discovered at Katuki Sewar of the Dang Valley in 1966. It is made of whitish grey phyllite and shows a green core. It is an axe of lenticular section with a broad, almost straight cutting edge. It is 19 cm. in length and 7.3 cm. at the cutting edge and 4 cm. at the flatish butt. Banerjee and Sharma have written that in shape and length it recalls the long and narrow blade of iron used by the women folk of the formers by fixing a long pole into the hole of the blade in the Kathmandu valley and suggests a similar use (1969:57).

Janak Lal Sharma has given the sketches of 7 neoliths in his paper (1983: Figs. 1-7). Six of them are axes and one chisel and they prove that Dolkha district of the Janakpur zone is a promising locality of neoliths in Nepal. The neoliths of the Kathmandu valley (Fig. 9), Nayala-Parasi and Jhapa districts (Figs. 11 and 13) reveal the same fact (Sharma 1983: Figs 11 and 13). These neoliths and the neolith picked up at Katuki Sewar by the present researcher show that in these two districts neolithic tool-technology and cultures existed in Nepal, and the Dang Valley was the meeting place of these cultures. Recently Gudrun Corvinus (1985:7-17) has also claimed to have discovered some neoliths from Dang and Deukhuri valleys. However, she has not given detailed account and illustrations of her discoveries like Stechenko did (1978:1-2).

Although the present researcher collected some shouldered axes from the Dang and Surkhet valleys in 1966, they were not given any importance by the archaeologists. This year again he found some shouldered axes in the Dang and Surkhet valleys. These implements show that as in Eastern India and Burma in Nepal also such tools were used by the people. They were definitely hafted and used for digging the roots of plants and herbs, and for breaking the clods of hard clay in the fields. Even one neolith the present researcher picked up at Kotre on the post-glacial river terrace of the Seti river. On the typological grounds the neoliths of Nepal have been dated between 1000 and 200 B.C. (Banarjee and Sharma 1969:53-58). However, Mohan Prasad Khanal and an Italian Excavation Party of the Kathmandu Valley have claimed to have found out some celts in the Lichchhavi stratified layer at Changu and on the surface of the Satyanarayan temple site of the Lichchhavi period respectively which simply indicate that the neolithic pattern of life continued in the Mahabharata Mountain ranges of Nepal in the early historical period also.

In the village of Takuchha on the right bank of the Kali-Gandaki river in the district of Mustang of Northern Nepal a cave-burial called Chokhopani has been discovered in 1984. The burial contained two fragmentary skeltons, hand-made grey vases, copper implements and carrings, shell-ornaments, stone (chert) arrow-heads and musk-deer teeth. Besides the globular pots and small jars some spouted pots and channel-spouted bowls, as at Navadatoli, have also been found over there. Outside India such vessels have been found in Late Neolithic and Early Bronze Age Crete (c. 2500-200 B.C.), Anatolia and Iran. But the bowls of Chokhopani are much similar to the bowls of Sialk Necropolis B and Gian. After a thorough analysis Tiwari, who discovered these objects, dates the cave

materials between 1000 and 400 B.C. Iron is absent here and pottery is grey and handmade (1985:1-12, pps. I-VII). The anthropomorphic figures of copper of the copper age of India, elaborately described by B.B. Lal in an article of *Ancient India*. The copper amulets, shell objects and arrow-heads of chert remind one of the copper age traditions recorded in various excavations in the Indo-Pak sub-continent. The present objects show that human culture advanced in the mountaineous region of the Himalayas of Nepal together with India and China and inhospitable landscape and environment of the country was not able to deter the people from having contact with the outside world.

Thus a peep into the prehistory of Nepal would elucidate to a fact-finder that this country is the abode of the first ancestors of Asia. In the plio-pleistocene period when great changes were taking place on the surface of Nepal owing to crustal movement, the Ramapithecus took his birth here about 11 million years ago. Like the Australopithecines of Africa he knew the use of fire, could walk erect and used pebbles, naturally spilt suitable stone flakes and wooden stick for hunting animals and water creatures such as fish and crocodile for his meals. As the time passed on, from them evolved the chopper-chopping tool-using men and they occupied the whole of the Mahabharata and Siwalik mountain ranges and valleys. This fact is attested by the chopper-chopping industry of the country from various regions.

In course of time the glacial period and quaternary flora and fauna ended and modern environment prevailed on the land with forests, everywhere which provided substantial means of livelihood to modern men of different origins to domesticate animals, live settled life and start agriculture. The modern men of Nepal, as elsewhere, made neoliths of different kinds for the purpose of deforestation and agriculture and invented pottery for storing their foodgrains, and for the purpose of cooking, eating and drinking. This fact is beautifully attested by the finds of neoliths alongwith handmade coarse red and grey ware sherds in the earlier strata of various excavations. The neolithic pattern of life continued in Nepal till the rise of the monarchical and republican states of northern India in the seventh century B.C. When powerful states evolved in Aryavarta and teachings of Lord Buddha gained momentum in the society, art of writing became very popular and written edicts and documents of the rulers began to be issued alongwith properly stamped coins. Now various social, legal and economic institutions also evolved under various organized governments. Since that time historical period begins and palaeolithic and neolithic patterns of life came to an end. However, Nepal being an inhospitable mountaineous country, its inhabitants of the innermost valleys and localities even today retain some prehistoric traits in their socio-economic and cultural life. This fact will be clear to the scholars who would take the pains to study the socio-cultural dynamics of the Kirats, Tharus, Chepangs, Tamangs and various other ethnic communities of the kingdom which occupy the remote interiors of the country in different regions.

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रागमाला:- नेपाली सङ्गीतबाट विलुप्त एक दुर्लभ शैली

रामशरण दनलि

१. रागमाला: सामान्य परिचय

रागमाला- विभिन्न रागहरूलाई एउटै मालामा उनेर गाउने चलनलाई रागमाला भनिएको हो । अर्थात् एकपछि अर्को रागलाई गाँस्दै एक साथ धेरै रागहरू गाउने चलनलाई रागमाला भनिएको हो । रागमालामा गाउने गीतका पदहरू पनि विशेष रूपमा तयार पारिएको हुन्छ । यस्ता गीतिपदहरूमा लयात्यकतासाथ विभिन्न रागहरूको नाम उल्लेख गरिएको हुन्छ । ती नाम उल्लेख भएका रागहरूको स्वर समातेर गायकले आफ्नो गायनकलाको खूबी प्रदर्शित गर्छ । गायकले रागमालामा ६ देखि १२ रागहरूसम्म गाउँदछन् । समयको अभावमा यसलाई केही रागमै मात्र पनि सिमित पार्न सकिन्छ । रागमाला गाउनका लागि शास्त्रीय संगीतको गायक मात्र भएर पुग्दैन, अपितु विभिन्न रागहरूमा पूर्णतः अधिकार जमाउन समर्थ कलाकारले नै रागमालालाई राम्ररी अभिव्यक्त गर्न सक्दछन् । रागमालामा छोटो छोटो तान वा अलाप लिएर अर्को रागको स्वर समात्नु पर्छ । यसको लागि पोख्त संगीतज्ञ र चतुर कलाकार हुनु आवश्यक हुन्छ । केही विशेष संगीतज्ञहरूबाट मात्र रागमालामा पाण्डित्यपूर्ण चमत्कार प्रदर्शन हुन सक्छ । साधारण शास्त्रीय गायकहरूबाट रागमाला उचित किसिमले गाइन्छ भन्ने कुरामा झट्ट विश्वास गर्न सकिँदैन । यसैले रागमाला सफलतासाथ गाउन वा बजाउनका लागि उच्चकोटीका कलाकार, उस्ताद वा संगीतज्ञहरू नै सक्षम हुन सक्छन् । रागै रागको माला भएकोले रागमालाको अर्को नाम रागसागर पनि भनिएकोछ (गोवर्धन १९८०:७६) । शास्त्रीय संगीतको यस विशिष्ट शैलीलाई पाश्चात्य संगीतमा सेलेक्सन (Selection) भनिन्छ । कुनै संगीतकारको राम्रा राम्रा संगीत रचना छनौट गरी एउटै शीर्षकमा प्रस्तुत गरिने प्रक्रियालाई सेलेक्सन भनिएको हो । यसलाई रागमालाकै अर्को रूप भन्नुमा अत्युक्ति हुँदैन ।

२. रागमालाको पृष्ठभूमि

रागमालाको परम्परा पन्ध्रौँ शताब्दीदेखिको अनुमान गरिए तापनि यसको अस्तित्व सम्राट अकबरदेखि देखा पर्छ । सम्राट अकबरको शासनकाल (सन् १५५६-१६०५) थियो । अकबरको समयमा तीन चारवटा रागमाला लेखिएको थियो । ती मध्ये कर्नाटकका पण्डित पुण्डरीक विट्ठल, उनकै समकालीन क्षेमकर्ण (खेमकर्ण) र इब्राहीम आदिल शाह द्वितीयका रागमाला र किताब-ए-नौरस प्रकाशमा आएकाछन् । तर सम्राट अकबरका नवरत्न

१२६ सि. एन्. ए. एस. जर्नल, भोलम १४, नं. २ (अप्रिल १९८७)

मध्येका ख्यातिप्राप्त संगीतरत्न तानसेनद्वारा रचित 'रागमाला' आजसम्म देख्न वा पढ्न पाइएको छैन । त्यसपछि अठारौं शताब्दीतिरका यशोदानन्द शुक्ल कविदासद्वारा लिखित एउटा हिन्दी रागमाला पटनाको काशीप्रसाद जायसवाल शोध संस्थानले जगदीश्वर पाण्डेयको सम्पादनमा प्रकाशित गरेकोछ । यी रागमाला ग्रन्थहरू बाहेक नेपाल र भारतका विभिन्न संग्रहालयहरूमा पनि हस्तलिखित रागमालाहरू देखा पर्छन् । हाम्रो राष्ट्रिय अभिलेखालयमा केही हस्तलिखित रागमालाहरू सुरक्षित छन् । ती मध्ये धेरै जसो मल्लकालीन र केही शाहकालका छन् । तिनमा तिथि मिति र लेखकको नाम अंकित नभएकाले यसै हो भनी ठोकुवा गर्न नसकिए पनि नेवारी र देवनागरी अक्षरमा नेपाली कागजमा लेखिएका त्यस्ता ग्रन्थहरूलाई विशेषज्ञहरूले यसै कालतिरको भनी खुट्याउन सक्छन् । छिमेकी देश भारतका विभिन्न संग्रहालयमा पनि केही ज्ञात र अज्ञात रागमालाहरू देखापर्छन् । पं. भातखण्डे अनुसार -

- बीकानेर पुस्तकालयमा - ९ सं. अनूप राग-सागर (रागमाला) ,
 - १७. रागमाला,
 - २६ रागमाला - पुंडरीक,
 र - ४३. रागमाला छन् र पं. पुण्डरीक विट्टल
 र क्षेमकर्णको रागमालाहरू प्रकाशित भै सकेकाछन् (भातखण्डे १९७२: २८-५१)

२.१ पं. पुण्डरीक विट्टलको रागमाला

सम्राट अकबरका समकालीन पं. पुण्डरीक विट्टलले आफ्नो रागमाला ग्रन्थमा ६ राग, तीस रागिनी र तीस पुत्र रागहरूको नाम दिएकाछन् । उनले ६ रागलाई पुरुष-रागको श्रेणीमा राखेकाछन् - शुद्ध भैरव, हिंदोल, देशिकार, श्री, शुद्धनाट र नटु-नारायण । यसैगरी प्रत्येक पुरुष रागका पांच, पांच स्त्री नाम (रागिनी) दिएका छन् ।

- शुद्ध भैरवका स्त्री रागहरू - धन्यासी, भैरवी, सैन्धवी, मारवी र आशावरी ।
 " " पुत्र रागहरू - भैरव, ललित, पंचम, परज र बंगाल ।
 हिंदोलका स्त्री रागहरू - भूपाली, वराटी, तोडी, प्रथम मंजरी र तुरुष्क तोडी ।
 " पुत्र रागहरू - वसंत, शुद्ध बंगाल, श्याम, सामन्त र कामोद ।
 देशिकारका स्त्री रागहरू - रामक्रिया, बहुली, देशी, जैतश्री र गुर्जरी ।
 " पुत्र रागहरू - ललित, विभास, सारंग, त्रावण र कल्याण ।
 श्री रागका स्त्री रागहरू - गौडी, पाडी, गुणकरी, शुद्ध रामक्रिया र गुंडक्रिया ।
 " पुत्र रागहरू - टक्क, देव गांधार, मालव, शुद्ध गौड र कर्णाट बंगाल ।
 शुद्धनाटका स्त्री रागहरू - मालवश्री, देशाक्षी, देवक्रिया, मधुमाधवी र आभिरि ।

शुद्धनाटका पुत्र रागहरू - जिजावंत, सालंगनाट, कर्णाट, छायानाट र हमीरनाट ।

नट नारायणका स्त्री रागहरू - बेलावली, कांभोजी, सावेरी, सुहवी र सौराट्टी ।

“ “ पुत्र रागहरू - मल्लार, गौड, केदार, शंकराभरण र विहागड ।

(कृपाल्वानंद १९७२:२८-५१)

२.२ क्षेमकर्ण (खेमकर्ण) को रागमाला

क्षेमकर्ण लिखित रागमाला पनि सो-हीँ शताब्दीको एक महत्वपूर्ण ग्रन्थ मानिन्छ । नारायण शास्त्री अनुसार क्षेमकर्णको रागमालामा ११५ श्लोक र २१ पत्र छन् । यो राग-मालामा पनि ६ राग, प्रत्येक रागका पाँच, पाँच रागिनी गरी तीस रागिनी र तिनका आठ, आठ, पुत्र गरी ४८ पुत्र समेत जम्मा ८४ राग-रागिनी र राग पुत्रका नाम दिइएका छन् । रागमाला इस्वी सन् १५७० मा समाप्त भएको थियो (आठले १९४३:३७) ।

२.३ इब्राहीम आदिलशाह द्वितीयको किताब - ए - नौरस

इब्राहीम आदिलशाह द्वितीय (सन् १५८०-१६२७) ले 'किताब-ए-नौरस' नामक एक संगीत ग्रन्थ प्रकाशित गरे । यस ग्रन्थमा रागमाला मात्र हैन राग-रागिनीको लक्षण र ध्यानका आधारमा लेखिएका रागमाला चित्र समेत रहेका छन् । आचार्य बृहस्पति अनुसार रागमालामा चित्रांकित गर्ने चलन संभवतः प्रथम पटक यही नै थियो (बृहस्पति १९८२: ६८) । यसैगरी डा. उदयनारायण तिवारीले आफ्नो लेखमा किताब - ए - नौरसमा परेका केही रागहरूका नाम दिएका छन् । राग भैरवलाई दर मुकाम भैरव नौरस भनिएकोछ । यसमा पहिलो चरणमा रागको ध्यान र दोस्रो, तेस्रो चरणलाई बैन र अभोग भनिएकोछ । उदाहरणार्थ यहाँ भैरव रागको श्लोक उद्धरण गरिन्छ ।

दर मुकाम भैरव नौरस

भैरव करपूर गौरा भाल तिलक चंद्रा ।

त्रिनेत्र जटा मुकुट गंगाधरा ।

बैन

एक हस्त रुंड नरा त्रिसूल जुगल करा ।

बाहन बलीवर्द सेत जात गुसाई ईश्वरा ।

कास कुरुत कुंजर पृष्ठ चरम व्यागरा ।

अभोग

सरप सिंगार टिष्ठन परछाई कल्पतरा ।

रमनी वादन मृदंग धाम कैलास तदुपरा ।

इब्राहीम उक्खत लच्छन राग भैरव महा उत्तिम सुंदरा ।

१२८ सि. एन. ए. एस. जर्नल, भोलम १४, नं. २ (अप्रिल १९८७)

भैरव कपूर जस्तै गौरवर्णका छन् । उनको निधारमा (द्वितीयाको) चन्द्र छ । उनले त्रिनेत्र, जटाजूटधारी शिरमा गंगा धारण गरेका छन् । एक हातमा रुंड र अर्को हातमा त्रिशुल छ । उनको वाहन सेतो सडिछ । हात्तीको छाला धारण गरेका र पृष्ठभूमिमा बाघको छालाछ । सर्प उनको शृङ्गार हो, उनी कल्पवृक्षको छाहारीमा बसेका छन् । एक रमणी मृदङ्ग वादन गर्दैछन् । उनको वासस्थान कैलाश पर्वत हो । इब्राहीम भन्दछन्- यो भैरव रागको श्रेष्ठ र सुन्दर लक्षण हो । यसै गरी उनले देसी राग, मल्लार राग र कान्हडा रागको लक्षणहरू पनि माथिका श्लोक अनुरूप दिएका छन् (तिवारी १९७०:६)।

२.४ पं. सोमनाथकृत 'रागमाला'

रागविबोधका ग्रन्थकार पं. सोमनाथले पनि ५१ राग-रागिनीका संस्कृत दोहा लेखी विभिन्न रागहरूको ध्यान दिनु भएकोछ । पं. सोमनाथ आन्ध्र प्रदेश निवासी भएकोले केही कनटिकी रागको नाम पनि परेकोछ । पं. सोमनाथले शाके १५३१ इस्वीसन् १६०९ मा रचेको 'रागमाला' को हस्तलिखित प्रति यसका प्रस्तुतकर्ता रसिकलाल माणिलाल पण्ड्याको संग्रहमा रहेकोछ (पण्ड्या १९७२:४१-४४)। संगीत मासिक पत्रिकामा उनैले यसलाई प्रस्तुत गरेका छन् ।

पं. सोमनाथले आफ्नो रागमालामा यसरी मंगलाचरण गरेका छन् -

श्री गणेशाय नमः । जगदंबायै नमः ॥

अथ देवतामयमिह क्रमतः कथयेतदे दैकम् ॥

संस्कृतमा दोहाको रूपमा पं. सोमनाथले सबै रागहरूको दोहा रचेका छन् । प्रारम्भको एउटा राग नमूनाको लागि प्रस्तुत छ -

गलराजि कमलराजिभाले भसिती रतःसदा नृत्ये ।

सुंदर गौरःशोणांबरधरणःशंकराभरणः ॥ १ ॥

शंकराभरण ॥

यसरी नै क्रमशः बेलावली, भूपाली, गौरी, वसंत, हिंडोल, ललित, जैताश्री, धनाश्री, भैरव, पौरविका, तोडिका, तुरुष्कतोडी, मल्लारि, नटमल्लारि, गौड, पूर्व-गौड, देशीकार, वराटी, बहुली, सारंग, नटनारायण, देवक्री, सौराष्ट्री, गौडी, चैती, पूर्वी, वावणी, कमोदी, नाट, आभेरी, कल्याण, श्रीराग, मालव, मालवगौड, कर्णाट, अडाण, छायाणट, हम्भीर, केदार, विहंगड, मालश्री, मंगला, मुखारी, रामक्री, पावक, सैधव, आशावरी, देवगंधार, मारवी र परज गरी जम्मा ५१ रागहरूका ध्यान संस्कृत दोहामा दिइएका छन् । श्लोकको अन्तमा शाके १५३१ सौम्य बर्षे अश्विन मासे शुक्लपक्षे हस्तनक्षत्रे अग्नितिथ्यौ सोमवासरे ॥ लेखिएकोछ ।

२.५ यशोदानन्द शुक्लद्वारा लिखित रागमाला

यस पंक्तिका लेखकको संग्रहमा सन् १९६० मा पटनाको काशीप्रसाद जायसवाल शोध-संस्थानबाट प्रकाशित तथा जगदीश्वर पाण्डेयद्वारा लिखित पृ. ८४ को एक पुस्तक रहेकोछ । यशोदानन्द शुक्लले यो ग्रन्थ सन् १७५८ मा लेखी सकेका रहेछन् । यस रागमालामा शुक्लाले सरलकवित्त, दोहा, सवैया, छप्पै र सोरठ छन्दहरूमा राग-रागिनीहरूको वर्णन गर्नु भएको छ । महताब रायका दरवारका संगीतज्ञहरूलाई गाउन सजिलो होस् भन्ने उद्देश्यले शुक्लाले यो रागमाला तयार गरेको बुझिन्छ । पछि रचिएको रागमाला भएकोले सोही शताब्दीतिर रचिएका राग-रागिनीहरूको क्रम र नामावली भन्दा यो फरक देखिनु स्वाभाविकै भयो । यशोदानन्दको रागमालामा राग-रागिनी, रागपुत्र र पुत्रबधुहरू पनि ६, ६ वटाको संख्यामा गणना गरिएका छन् ।

भैरव राग

- भैरवका पत्नीहरू - रामकरी, मालसिरी, धनासिरी, सिंधुरा, भैरवी र आसावरी ।
- ॥ पुत्रहरू - धौला, श्याम, शुद्ध, मालकौस, अजयपाल र कन्हरनट ।
- ॥ पुत्रबधुहरू - रेवा, रंभेली, सूही, सूहो, भठियाल र अष्टी ।

अथ भैरव समाज कवित्त

रामकरी मालसरी धनासरी सिंधुरा औ भैरवी असावरी ये भारजा बणानी है ।

धौल स्याम सुद्ध और मालकौस अजैमाल छठयौ कन्हरनट सुत सुणदायी है ।

रेवा औ रंभेली सूही सूहो भठियाल पुनि अष्टी ए तो पुत्र-वधु सब जग जानी है ।

ऋषभ सणा है एक सोहनी सहेली यह भैरव को भेद कविदास रस बानी है । (ठाकुर १९७६: ड... ज, १७)

यसरी नै मल्हार राग, श्री राग, बसन्त राग, कारनाट राग र हिंडोल रागका पनि ६, ६ वटी पत्नीहरू, पुत्रहरू र पुत्रबधुहरू का नाम छन् ।

यसरी प्रत्येक राग, रागिनी, पुत्रराग, पुत्रबधु र सखा सखी गरी राग परिवारका १२६ भेद हुन जान्छन् । ती सबैका विवरण र ताल, गायन दोष, आदि विषयमा पनि कविदास उपनामधारी यशोदानन्द शुक्लले रागमालामा रागधर्मिताको निर्वाह गरेकाछन् । यस किसिमको कवित्त, दोहा, सवाइ र छप्पैबाट अनेकौँ राग-रागिनीहरू रागमालामा उत्रन सक्छन् । अनेकौँ प्रकारका रागमाला रचनाहरू तयार हुन सक्छन् ।

३. नेपालमा रागमालाको परम्परा

नेपालमा पनि रागमालाको चलन प्राचीनकालदेखि चलेको हुनुपर्छ । नेपालमा लिच्छविकालका संगीत सामग्रीहरू अप्राप्य भएकोले त्यसवेलाको संगीत विषयमा शोध-खोज नभई यसै अन्दाज गर्न मिल्दैन । तर, यस विषयमा मल्लकालमा धेरै काम भएको अड्कल लगाउन सकिन्छ । राष्ट्रिय संग्रहालयमा सुरक्षित हस्तलिखित रागमालाहरूले हामीलाई ठूलो आशा जगाई दिएकोछ । रागमालामा लेखिएका मल्लकालीन राग र तालको आफ्नै प्रकारको मौलिक स्थान रहेकोछ । त्यतिवेला नेपालमा राग र तालहरूलाई नेपालीकरण गर्ने जमर्को पनि भएको पाइन्छ । यसै अनुरूप नेपाली राग र तालको नाम र स्वरूप आफ्नै मौलिकपन लिएर जीवित रहेकोछ । मल्लकालीन संगीतको अन्वेषण भएमा यी सब कुरा अझ प्रस्ट हुने नै छन् । नेपालमा रागमाला मात्र हैन, तालमालाको पनि आफ्नै वैशिष्ट्य थियो । प्रेमबहादुर कंसाकारद्वारा प्रस्तुत एक नान्दी (शून्यम्ये) मा नृत्यनाथको विविध नेपाली तालमालाको अनुभव गर्न सकिन्छ । राग मारव (मालव) ताल नवमानमा गाइएको प्रस्तुत गीतले त्यसमा उपयोग गरिएको ताल बारे राम्ररी प्रकाश पर्दछ । प्रस्तुत गीतमा कोष्ठकमा परेका शब्दहरू तालकानाम हुन् ।

जे माहेश्वर (परिमान)
नाचय दिगम्बर (जति)
पंचवदन मंगल (एकताली)
नृत्यकला पर (अस्तरा) काशे (रूपक)
त्रिपुर निकन्दन (चौताला)
त्रिभुवन वन्दन रञ्जन (खर्जती)
निजजन पुरजु आसे (गि)
जय जय महेश सुरेश (प्रताल)

- गोपीचन्द्र गोरख विजय

(कंसाकार: २०१९)

३.१ प्रा. बालकृष्ण पोखरेलले आफ्नो ग्रन्थमा वि.सं. १८८८ तिरका एक नेपाली कविको परिचय दिनुभएकोछ । कविको नाम हीनव्याकर्णी विद्यापति हो । त्यसताका रचिएका उनका चार थरि रचनामा 'सात राग' शीर्षकको रागहरूको ध्यान भएका कविताहरू पनि परेकाछन् । कवि विद्यापतिले ती सातै रागहरूलाई 'रागमाला' को किसिमले लेखेका छन् तर, नामकरण चाँही 'सात राग' गरेकाछन् । कविले गूर्जरी, गौडमालव, वसन्त, रामकरी (रामकली), देशाख, वराडी र गुणकरी (गुणकली) रागको बयान दिएकाछन् । यसलाई सरासर 'रागमाला' नामकरण गरे हुनेमा, कविका कल्पनाले सात राग बनाउन पुग्यो होला । सातसंग मोह भएका कविले सात नायिका पनि रचेकाछन् । त्यतिवेला रचिएको यस्तो कविता संगीतकारको हातमा परेको भए संगीतबद्ध भई रागमालाको रूपमा

व्यक्त हुन पुग्यो । चित्रकारहरूले पाएका भए यसैका आधारमा सुन्दर चित्रहरू कोरिन्थे होलान् । तर, धेरै दशक पछि प्राध्यापक बालकृष्ण पोखरेलको हात पर्दा यसले नेपाली साहित्यमा एउटा चहलपहल नै ल्याई दियो । (पोखरेल २०३२:१०७) यसै गरी अर्का अन्वेषक डा. जगदीशचन्द्र रेग्मीले यिनै कविको राग बारमासा (बारहमासा) पत्तो लगाई गुणलाउनु भएकोछ (रेग्मी २०३२:७२-७३)। नेपाली संगीत जगत्को लागि नेपाली भाषा-मा नेपाली कविले लेखेको सातराग (रागमाला) ज्यादै उपयोगी हुनसक्ने भएकोले ती सातैवटा रागका श्लोकहरू यहाँ उद्धृत गर्न चाहन्छु । यसबाट आजका संगीतकार र चित्र-कारहरूले पनि प्रेरणा लिन सक्तछन् ।

सात राग -

गूर्जरी -

श्याम श्रीखंडन वन कोमल पुष्पशय्यामाहां ।
गयी वेदकी सोर विभाग् वीणामा ।
भर्ता रिझाउन तालको भाव बताउँदी ।
गाउँदी त दक्षिण गूर्जरी रागनामा ॥ १ ॥

गौडमालव -

नितविनीको मुखकमलमधू रस चुँवनले मत्त भयाको ।
कुँडलधारी मनोहर माली शूक समान सरीर खुल्याको ।
सांझ विणे गयी ।
राजराजेश्वरी चक्रचूडामणि गौडामालव नाम धन्याको ॥ २ ॥

वसन्त -

मयूर मुकटधारी हस्तिमाहां सवारी ।
अतुगुणगण सेना महाराज्झैँ भयाको ।
मगन मदन मूर्ति वीणामाहां सुहाउँदो ।
विरहीको मन हर्दो राग नाम वसंत ॥ ३ ॥

रामकली -

गोरो वर्ण नीलो पिछौरा वढ्याकी ।
षचिर् रत्न शुन्का भूषणले जड्याकी ।
प्रिये पाव्मा छन् त पनी यी बस्याकी ।
सभैमा उची राम्करी रागनामा ॥ ४ ॥

देसाख -

गोरो चन्द्रमा झैँरवि झैँ प्रचंड ।
शूरो वीर् लडाजिमा छाती ढाल तुल्याउँदो ।
फुराइ बाहुली फट्कदो वीर जगत्मा ।
जितानन्दको राग् देशाखै भनिन्छ ॥ ५ ॥

बराडी -

सुकेशी षसमलाई रिझाउँदी सरूपमा ।
चवंर चालदा हात कंकण वजाउँदी ।
पारीजातका फुल्को गुद्धो कान्मा लाउँदी ।
रमिद् देहकी राग् बराडी भनिन्छे ॥ ६॥

गुणकली -

सुरलोभिनी हात्मा माला लीयाकी ।
स्वयंवर परीक्ष्या रमित् कान् त रोज्दी ।
कोमल पुष्पशय्या बसी दृष्टि फेर्दी ।
सरूप सुन्दरी गुणकरी राग भनिन्छे ॥ ७॥ (पोखरेल २०३२:७२-७३)

३.२ माध्यमिक कालीन नेपाली संगीतज्ञहरूमा रागमालाको प्रभाव

माध्यमिक कालका नेपाली संगीतज्ञहरूमा रागमाला प्रस्तुत गर्ने क्षमता अवश्य नै रहेको हुनुपर्छ । ताज खां, दुन्देखां, बालाप्रसाद शर्मा, पं. देवचन्द्र रेग्मी, नानकप्रसाद मिश्र र उस्ताद उजीर जस्ता धुरन्धर संगीतज्ञ र कलाकार भएको काठमाडौंमा जहाँ प्रत्येक संध्या संगीतमय जल्साले भरिपूर्ण रहन्थ्यो । त्यस्तो विशिष्ट संगीत जल्साहरूमा रागमाला गाइ-दैनथ्यो भन्ने कल्पनासम्म पनि गर्न सकिँदैन । नेपालका त्यस्ता प्रसिद्ध कलाकार र संगीतज्ञहरूबाट अवस्थनै रागमालाहरू गाइएका थिए होलान् तर त्यसबेला मात्र रागमालामा कसैको ध्यान जाँदैनथ्यो होला । त्यसको खोज र अनुसन्धान गर्ने खाँचो महशुस गरिएन होला । नत्र आजसम्ममा प्रशस्त रागमाला परम्परा फेला पर्ने थिए होलान् । जेहोस्, हिन्दू संगीत इतिहासमा वि.सं. १९५६ पस महीनाको बगेडी संगीत सम्मेलन अमर रहेकोछ । भारतीय संगीत विश्वविद्यालयहरूले समेत यस महत्वपूर्ण ऐतिहासिक घटनालाई संगीत इतिहासमा ठूलो स्थान दिएकाछन् । लखनऊको भातखण्डे संगीत विश्वविद्यालयमा यसको स्मरण ताजा राख्न एउटा तस्वीर अझै टाँगिएकोछ । (दर्नाल २०३८:१६०)

प्रधानमन्त्री वीर शम्शेर ज. ब. रा. को कार्यकालमा प्रसिद्ध संगीतज्ञ ताजखा र दुन्देखांको निर्देशनमा तयार पार्ने लगाइएको शास्त्रीय संगीतको महत्वपूर्ण हस्तलिखित संगीत ग्रन्थ रथी माधवशम्शेर ज. ब. रा. का निवासस्थानमा देख्न सकिन्छ । यस पंक्तिका लेखकले सो ग्रन्थ रथी माधव शम्शेरका अनुग्रहले एक दुई पटक हेर्ने अवसर पाएकोहुं । सरसरती हेरिएकोले तिनमा रागमाला रहे नरहेको याद भएन तर उक्त ग्रन्थमा रागकाध्यान, लक्षण र विवरण भने अवश्य रहेजस्तो लागेकोछ । शास्त्रीय संगीतमा लेखिएको यस प्रकारको उच्चतम संगीत ग्रन्थ श्री ५ को सरकारका संग्रहालय, विश्वविद्यालयका अनुसन्धान निकाय वा नेपाल राजकीय प्रज्ञाप्रतिष्ठानमा पछिल्ला पुस्ताहरूको लागि सुरक्षित गरि राखिनु पर्ने थियो । अहिलेसम्म त्यस्तो व्यवस्था तिर कसैको ध्यान आकर्षित भएजस्तो लाग्दैन । यस-तर्फ समयमै विवेक राख्न सके नेपालको एउटा ठूलो सांगीतिक निधिको रक्षा हुनेथियो ।

एक प्रसंगमा नेपालका सितार गुरू गणेश भण्डारीले यस पंक्तिका लेखकलाई भन्नु भयो - 'स्वर्गीय हरिराजा (टी. एल. राणा) नेपाल आउनु भएको बेला अलि विशिष्ट संगीतज्ञहरूको भेलामा धेरै किसिमका रागहरू सम्मिलित गरी रागमालाको रूपमा गाउनु हुन्थ्यो । उहाँको रागको विविधता र कठिन तालको सफल प्रदर्शनले हामी सबै अचम्म मान्थ्यौं ।

रागमाला गायनमा भन्दा वादनमा प्रभावकारी सिद्ध हुन्छ । तर नेपाली कलाकारहरूबाट त्यस्तो प्रयास भएको देखिंदैन । रागमालामा रेकर्ड भएको पनि थाहा छैन । विशेष अवसरमा आफ्नो कलाको चमत्कार देखाउन र पांडित्य प्रदर्शनका लागि कहिले कांही रागमाला प्रदर्शन भए होलान् पनि । तर त्यस्तिले मात्र रागमाला संगीतको विकासमा टेवा पुग्न सक्तैन । यसको लागि विशेष प्रचार प्रसार र शिक्षाको आवश्यकता पर्दछ । आजपनि भारतीय संगीतज्ञहरूले आफ्नो कला प्रदर्शनको एक मुख्य अंग रागमालालाई मानेका छन् । प्रसिद्ध सरोदवादक अली अकबर खां, प्रसिद्ध सितारवादक पं. रविशंकर र प्रसिद्ध बेलावादक बी. जी. जोगले रागमालामा डिस्क रेकर्ड गराई सकेका छन् । यस विषयमा नेपाली संगीतज्ञ र कलाकारहरूले चाँही उदासिनता नै देखाए जस्तो छ । रागमाला शैलीको संगीतलाई व्यापकरूपमा प्रचार-प्रसार गर्नु अत्यावश्यक भैसकेको छ । नेपाली संगीतज्ञ र कलाकारहरूले यसतर्फ केही गर्न कम्मर कस्तु पर्ने बेला आइ सके जस्तो अनुभव हुन्छ ।

हुनत खयालमा एउटै रागलाई दुई, तीन घण्टासम्म पनि गाउन सकिन्छ । तर सफल कलाकारिता र प्रदर्शनको अभावमा यो हाई हाई आएर टिठ लाग्दो पनि हुन सक्छ । यसको सट्टा विभिन्न रागहरू एकपछि अर्को बदल्दै गाउन वा बजाउन सकेमा श्रोताहरूलाई विविध राग र रसले आनन्दित बनाउन सक्छ । एकपछि अर्को लहरमा पुगेको अनुभव गर्न सकिन्छ । केवल चमत्कार र पांडित्याई मात्र हैन, अपितु श्रोताहरूलाई मुग्ध पार्ने प्रक्रियामा पनि रागमालाको परम्परालाई अघि बढाउनु आवश्यक ठान्दछु ।

रागमाला यस्तो संगीत शैली हो जसलाई नेपाली संगीतज्ञ र गायक वादक सबैले आ-आफ्नो क्षेत्रबाट साधना गरि श्रोताहरूको मन खिच्न सक्छन् । यही कुरा दृश्यकलाका नेपाली चित्रकार वा मूर्तिकारमा पनि लागू हुन्छ । नेपाली चित्रकलाका कलाकारहरूले नेपाली रागमालाका श्लोक, रागध्यान र रागलक्षणका आधारमा दर्शकका आँखाहरूलाई प्रशस्त सुख प्रदान गर्न सक्छन् । हाम्रा पुख्रिले छाडिगएका यस्ता परम्परागत कलाशैलीहरूलाई जीवित राख्नमा आजका युवा कलाकारहरूले पनि अभिरुचि देखाउन, यसको विकासमा कम्मर कस आवश्यक भैसकेको छ ।

४. रागमाला चित्रण -

नेपालमा प्राचीनकालदेखि चित्रकलाको परम्परा चल्दै आएपनि रागमाला चित्रहरू नगण्य रूपमा मात्र फेला पर्दछन् । वरिष्ठ नेपाली कलाकार लैनसिंह बाङ्गदेलका अनुसार

नेपालमा पहिलो ग्रन्थ चित्र ने. सं. १३५ (ई. सन् १०१५) को 'प्रज्ञा-पारमिता' हो । यसैगरी नेपालको ग्रन्थ चित्रहरू बारे स्टेला क्रैमरिश, कार्ल खण्डेलबाला र डा. प्रतापदित्य पालले राम्ररी प्रकाश पारेका छन् । यसबाट नेपालमा सबभन्दा पहिले ग्रन्थ चित्रहरू शुरू भएका रहेछन् भन्ने थाहा हुन्छ । पहिले यस्तो ग्रन्थ ताडपत्रमा लेखिन्थे । एघारौँ शताब्दी-देखि नेपालमा कागजमा चित्र लेख्न थालिएको हो । पछि पौभा (थाङ्का) र सत्रौँ शताब्दीको अन्तिरमात्र पटचित्र लेख्न थालिएको हो (बाङ्गदेल २०३८:१९, ५६) । नेपालका संग्रहालयहरू र विदेशका संग्रहालयहरूमा समेत त्यस्ता ग्रन्थ चित्रहरू प्रदर्शित छन् । मैले देखेका ग्रन्थ चित्रहरूमा पञ्चरक्षा, शिवधर्म, विष्णुधर्म, देवीमहात्म्य, बिसन्तर (जातक) चण्डी र महाभारतको प्रारम्भमा लेखिएका र मार्कण्डेय पुराणको ग्रन्थ चित्रहरू छन् । ती ग्रन्थचित्रहरू आज पनि राष्ट्रिय चित्र संग्रहालय, राष्ट्रिय संग्रहालय र राष्ट्रिय अभिलेखालयमा देख्न सकिन्छ ।

४.१ नेपालमा रागमाला चित्रण परम्परा -

नेपालमा रागमाला चित्रणको परम्परा कमसेकम मल्लकालदेखि चली आएको थाहा हुन्छ । नेपाली रागमालाको चित्रहरूको खोजीमा यस पंक्तिका लेखकले नेपालका सबै संग्रहालय, अभिलेखालय, पुस्तकालय र पुराना चित्रकारहरूसँग सम्पर्क राख्यो । केही रागमालाका हस्तलिखित ग्रन्थहरू राष्ट्रिय अभिलेखालयमा हेर्न पाए पनि चित्र सहितको रागमाला कुतै देख्न पाइएन । पुराना कलाकारहरूबाट पनि नेपाली चित्रकलामा रागमालाको परम्परा अवश्य नै हुनुपर्छ भन्ने सम्म सुन्न पाइयो । उनीहरू कहाँ पनि कुनै रागमाला चित्र देख्न पाइएन । रागध्यान र रागलक्षणका कुनै पनि नेपाली चित्र देख्न नपाउँदा नेपालमा रागमाला चित्र रहेनछ भन्ने धारणामा पुग्न पुग्न लागेको बेला बेलायतबाट क्यारोल-टिङ्गिले लण्डन युनिभर्सिटी पुस्तकालयबाट आफ्नै नाममा दर्ता गरि केही हप्ताको लागि मलाई एउटा दुर्लभ संगीत ग्रन्थ ल्याई दिएको रहिछन् । सो पुस्तक जतिसक्दो चाँडो अध्ययन गरि उनकी बहिनी एलिनाको हात लण्डनको पुस्तकालयमा फिर्ता गरि दिनु पर्ने थियो । सो पुस्तक समयमै फिर्ता भयो पनि । तर त्यसको चित्रहरू फोटोकपी गर्न नपाएकोमा म आज पनि पछुताई रहेछु । क्यारोल टिङ्गिले उपलब्ध गराई दिएको सो पुस्तकमा भारतमा चित्रण गरिएका २८ रागमाला चित्रहरू श्लोक समेत सचित्र छापिएका छन् । ती राग-रागिनीका स्वरलिपिहरू (स्टाफ नोटेशनमा) पनि पूरा दिइएकोछ । अन्तमा पुस्तकका लेखकले राग-मालाहरू भनी कोष्ठकमा नेपालको नाम दिइ केही नेपाली रागमालाहरूको चित्र दिएका छन् । ती रागमाला करीब दुई दशक अघि नेपाल आएका इंडियाना विश्वविद्यालयका छात्र टेरेन्स बेकले संग्रह गरेका कतिपय रागमाला चित्रहरू मध्ये १३ वटा रागमाला चित्र रागका ध्यान (श्लोक) समेत सचित्र दिइएकोछ । तर, ती रागहरूको स्वरलिपि दिइएको छैन । न त रागमाला रच्ने कविको नाम छ, न त चित्रकारको, न त रागमाला ग्रन्थको तिथिमिति नै । तैपनि यो रागमाला चित्रले नेपालको समृद्ध रागमाला परम्परा रहेको ज्वलन्त प्रमाण दिएकोछ । यसका संकलनकर्ता टेरेन्सबेकले नेपालको रागमाला वीर

पुस्तकालयबाट प्राप्त भएको सूचना दिएका छन् । तर, सो रागमाला (सचित्र) राष्ट्रिय अभिलेखालयमा देख्न सकिएन । वाल्टर काफ्मनको पुस्तकमा परेका ती 13 रागमाला चित्रहरू मध्ये सातौँ चित्रमा श्री राग या ध्यान भनिएको छ । यसैले रागमाला चित्र देवनागरी लिपिमा श्लोकबद्ध भएता पनि नेवारी भाषा भने यसमा रहेको थाहा हुन्छ । श्री रागको ध्यान नभनेर श्री राग या ध्यानले यस्तै थाहा हुन्छ । यसै गरी चित्र नं. २ को रागिनीमा पनि पहाडि रागिणी या ध्या (ध्यान) भनी लेखिएको छ । रागहरूको वर्णमा-रक्त, पीत, हरित, श्वेत, नील पाँच रंगको वर्ण अंकित भएको छ भने अंग्रेजी अक्षरमा पनि रेड, यलो, ग्रीन, व्हाइट, ब्लू लेखिएका छन् । यो अंग्रेजी अक्षर पहिलेदेखि नै चित्रकारले लेखेको हो वा पछि सजिलोका लागि कसैले अंग्रेजीमा लेखि दिएको हो ? बुझ्न सकिएन । (Kaufmann 1984:601-604)

रागमाला (नेपाल) मा दिइएको राग ध्यान र श्लोक यस प्रकार छ -

- १ - आसावरी रागिणी ध्यान ॥, श्लोक २८, पृ. ९
- २ - पहाडि रागिणी या ध्या ॥, श्लोक २९, पृ. ९
- ३ - मल्लारी रागिणी ध्यान ॥, श्लोक ३२, पृ. १०
- ४ - देशकारी रागिणी ध्यान ॥, श्लोक ३३, पृ. १०
- ५ - ककुभ रागिणी ध्यान ॥, श्लोक ११, पृ. ४
- ६ - हिंडोल राग ध्यान ॥, श्लोक १२, पृ. ४
- ७ - श्री राग या ध्यान ॥, श्लोक २६, पृ. ८
- ८ - सारङ्ग रागिनी ध्यान ॥, श्लोक ३०, पृ.
- ९ - मेघ राग ध्यान ॥, श्लोक ३१, पृ.
- १० - वसन्त राग ध्यान ॥, श्लोक ६९, पृ. २० (रा. मा.)
- ११ - मालवि राग ध्यान ॥, श्लोक ७०, पृ. २०
- १२ - सारङ्ग राग ध्यान ॥, श्लोक ६३, पृ.
- १३ - सौरी राग ध्यान ॥, श्लोक ६४, पृ.

उपर्युक्त रागमाला चित्रणमा परेका रागध्यानहरू अध्ययन गर्दा जम्मा १३ राग, रागिनीहरू चित्रित गरिएका छन् । यिनमा ७ राग-हिंडोल, श्री, मेघ, वसन्त, मालवि, सारङ्ग र सौरी छन् भने आसावरी, पहाडि, मल्लारी, देशकारी, ककुभ र सारङ्ग ६ रागिनी छन् । रागध्यान कुन संगीत ग्रन्थको आधारमा लेखियो ? थाहा हुन नसकेकोले कुन पद्धतिको गणनामा पर्छन् केलाउन पर्ने हुन्छ । सामान्यतः मुख्य राग सबै ग्रन्थकारले ६ वटा नै मानेका छन् । यसमा एउटा बढी राग कसरी पर्ने आयो ? सामान्यतः मालवि, सौरी र सारङ्ग मुख्य ६ राग भित्र पर्दैनन् । मालवि र सौरी रागिनीहरूमा र सारङ्ग पुत्र रागमा पर्दछन् । रागमाला चित्रलाई ध्यानमा राखेर चित्रहरू छनौट गरिएकोले यसो हुन गएको हुन सक्छ ।

राग ध्यान र लक्षणका प्रथम ग्रन्थ डा. ओ.सी. गांगुलीद्वारा लिखित 'रागज एण्ड रागिनीज्' हो । यस ग्रन्थमा प्राचीन संगीत ग्रन्थकारहरूको रागध्यान र लक्षणका आधारमा १०८ वटा राग रागिनीहरूको श्लोक सहित सचित्र वर्णन दिइएकोछ । डा. गांगुलीले भारत मात्र हैन विदेशमा रहेका भारतीय रागमालाहरूको पनि संकलन गरी समग्र रूपमा राग-रागिनी चित्रणको विश्वकोष नै प्रदान गरेका छन् (Gangoly 1966:) ।

भारतीय चित्रकलाका पुस्तकहरूमा सैंकडौं रागमाला चित्रहरू संकलन भएकाछन् । त्यस्ता पुस्तकको कुनै कमी देखिंदैन । तर खास रागमाला चित्रण सम्बन्धी पुस्तकहरूलाई भने बिर्सन सकिंदैन । रागमाला चित्र सम्बन्धी पुस्तकहरू तयार पार्ने लेखकहरूमा डा. प्रताप-दित्य पाल, अन्स्ट र वाल्दस्मीद, डा. एम. एस. रन्धवा र लक्स एबेलिंगको नाम स्मरण गर्न सकिन्छ । लक्स एबेलिंगले सन् १९७३ मा रागमाला चित्र सम्बन्धी एक सुन्दर ग्रन्थ तयार पार्नु भएकोछ । तर, उक्त ग्रन्थमा पनि नेपालको रागमाला भेटिंदैन । डा. प्रताप-दित्य पालले अमेरिकामा संग्रहित केही नेपाली रागमालाको सूचना दिएकाछन् । यसरी फाट्फूट रागचित्रहरू कहाँ कहाँ फेला परेपनि समग्र रूपमा नेपाली रागमाला चित्र संग्रह अझै पनि प्रकाशमा नआउनु दुःखको कुरा मात्र हैन, हाम्रो परम्परागत चित्रकलाको भविष्यको लागि पनि राम्रो कुरा भएन । नेपालले आफ्नो समृद्ध परम्पराको निधि सुरक्षित राख्न नसके आगत पुस्ताले हामीलाई धिक्कार्नेछ । यसैले रागमाला चित्र संग्रह गरी यसको प्रकाशनमा समय मै विवेक पुऱ्याउन आवश्यक भै सकेको अनुभव गरिन्छ । नेपाली रागमाला चित्रणको समृद्ध परम्परालाई जोगाउन पर्दछ । समयमै हामी यसतर्फ सचेत रहेनौं भने पछि पछुताउनु बाहेक केही गर्न सकिने छैन ।

५. रागमाला स्वरलिपि -

नेपाली हस्तलिखित संगीत ग्रन्थ वा मुद्रण भएका नेपाली संगीत ग्रन्थहरूमा राग-मालाको स्वरलिपि पढ्न पाइंदैन । भारतीय संगीत ग्रन्थहरूमा केही रागमालाहरू श्लोक सहित प्रत्येक राग स्वरलिपिमा दिइएकोछ । कृष्णशंकर शुक्लले एकताल, १२ मात्रामा एउटा रागमाला (आठ राग-रागिनी) को स्वरलिपि दिएकाछन् (संगीत १९४२:१७५-१७६) । यसै गरी चिरञ्जीवलाल 'जिज्ञासु' ले ६ राग-रागिनीको राग-सागर (रागमाला), गुलाम रसुलले आठ राग-रागिनीको राग-मालिका (जिज्ञासु १९८३:१२१) र सुनीलकुमार भट्टाचार्य 'नटन' ले चौबीस राग-रागिनीको राग-मालिका स्वरलिपि र श्लोक सहित प्रकाशित गरेकाछन् (भट्टाचार्य १९७२:१०३-१६२) । यशोदानन्द शुक्लको रागमालामा स्वरलिपि दिइएको छैन ।

नेपाली रागमालाको उदाहरण स्वरूप यहाँ केही प्रसिद्ध संगीतज्ञ र कलाकारको रागमाला रचना स्वरलिपि समेत प्रस्तुत गरिएकोछ । प्रस्तुत रागमाला स्वरलिपिबाट राग-मालाको स्वरूप केही मात्रामा भएपनि स्पष्ट हुनेछ । गायक कलाकारलाई यसबाट राग-मालाको बारेमा संक्षेपमा भएपनि केही ज्ञान हुनेछ ।

नेपालका प्रसिद्ध शास्त्रीय संगीत गायक संगीत प्रवीण, नरराज ढकालले शास्त्रीय संगीतमा सात राग-रागिनीहरूको समूहमा सप्तरंगी रागमाला तीन ताल मध्यलयमा रचनु भएकोछ । रचना यस प्रकारछ -

सप्तरङ्गी रागमाला
तीन ताल, मध्यलय ।

स्थायी - जयती जय नेपाल जननी
पूर्व मेची पश्चिम महाकाली
छन् तिम्री बहिनी

अन्तरा - डेढ करोड सपुत तिम्रा
हामी सन्तति छौं
एकै स्वरले गाउँछौं
जय तिम्रो होस् भनी ।

(- नरराज ढकाल)

स्थायी:-

हमीर

०	सा	नि	ध	प	३	मे	प	ग	म	X	नि	ध	-	-	नि	२	सा	रे	सां	-
	ज	य	S	ती		ज	य	ने	S		पा	S	S	ल		ज	न	नी	S	

यमन

प	-	पमे	रे	-	रे	ग	रे	नि	रे	ग	रे	नि	रे	सा	-
पू	S	र्वS	मे	S	ची	प	S	श्चि	म	म	हा	का	S	ली	S

बहार

म	-	म	-	म	प	ग	म	नि	-	ध	नि	सां	रे	नि	सां
छन्	S	ति	S	म्री	S	ब	हि	नी	S	S	S	S	S	S	S

अन्तरा:-

मालकोश

०	ग	म	ध	नि	३	सां	-	सां	-	X	नि	सां	गं	मं	२	गं	-	सां	-
डे	S	ढ्	क			रो	S	S	ड		स	पु	S	त		ति	S	म्रा	S

दरवारी

ध	-	नि	-	प	-	म	प	ग	-	म	-	रेसा	निसा	रे	सा
हा	S	मी	S	स	S	न्त	ति	छौं	S	S	S	SS	SS	S	S

भीमपलासी

सा गु म प | गु गु रे सा | गु म प नि | ध - प प |
ए S कै S | स्व र ले S | गा S उं S | छौं S ज य |

भैरवी

गु म ध नि | सारे गुं सां रे | सां - - निध | पुम गुरे सा - |
ति S प्रो S | होS S स् भ | नी S S SS | SS SS S S |

यसै गरी नेपाली शास्त्रीय वादनका प्रसिद्ध बेलावादक गोपालनाथ योगीले राग-माला नामक आठ राग-रागिनीको समूहमा स्वरलिपिबद्ध गर्नु भएकोछ । श्लोकका रचना-कार कोहुन् थाहा भएन । तीनै श्लोकका आधारमा उहाँले प्रस्तुत रागमालाको स्वरावली तयार पार्नु भएको हो । स्थायी ४ राग र अन्तरामा ४ राग गरी आठ राग-रागिनीको यो रागमाला पनि स्वयंमा एउटा नमूना हुन सक्छ ।

रागमाला

एकताल, १२ मात्रा ।

स्थायी - भैरव अभिराम राग
भैरवी पूनीत कही
भीमपलास संग लिजे
बागेश्वरी मृदुल भाग ।

अंतरा - मध्य में बहार आवे
पीलू धुन से सुहावे
सारङ्ग घर शोभे श्याम
कल्याण कहे अघाग ।

स्थायी:-

भैरव

^xधुप ध | ^० प म | ^२ ग रे | ^० रेग - | ^३ ग म | ^४ - म |
भैS S | र व | अ भि | राS S | म रा | S ग |

भैरवी

गुरे गु | रे सा | रे सा | ध नि | सा गु | रे सा |
भैS S | र वी | S पू | नी S | त क | ही S |

भीमपलासी

नि	सा		सा	मु		मु	म		प	-		नि	प	नि		सां	नि	धु	प
भी	म		प	लु		सु	स		सं	S		ग	लि	सु		सु	जे	सु	जे

बागेश्वरी

सां	नि		ध	म		ध	नि		ध	नि	सां	नि		ध	प	मु		रे	सा	नि	सा
बा	S		गे	S		श्व	री		मृ	S	दु	S		लु	भा	S		सु	गु	S	गु

अन्तरा:-

बहार

^X प	-		⁰ म	प		² गु	म		⁰ नि	ध		³ नि	सां		⁴ नि	सां	
म	S		ध	मे		S	ब		हा	S		र	आ		S	वे	

पीलू

गुं	रे		सां	नि		सां	नि		ध	म		नि	सां		गु	रे		सा	नि		सां
पी	S		लू	S		धु	S		से	S		सु	S		हा	S		सु	S		वे

सारंग

म	प		नि	सां		रे	मं		रे	नि		सां	नि		S	प	
सा	S		रं	ग		ध	र		शो	S		भे	स्था		S	म	

कल्याण

मे	-		ध	-		नि	ध		मे	ध		मे	प		गु	ग		रे	-	
क	S		ल्यां	S		ण	क		हे	S		सु	S		अ	धा		S	ग	

(- गोपालनाथ योगी)

अन्तमा -

रागमाला केवल संगीत पक्ष मात्र नभई यो काव्य र कलाको पनि अनुपम अभिव्यक्ति हो । रागमालाको प्रारम्भ मै तत्सम्बन्धी रागहरूको सुन्दर चित्रण गीतबाट हुन्छ । यस-पछि गायन वा वादनको लागि स्वरावली (स्वरलिपि) तयार पारिन्छ । कलाकारले त्यस-लाई साधना सहित आफ्नो कलाकारितासाथ श्रोतामा प्रस्तुत गर्दछ । अनि रागलक्षण र ध्यानका आधारमा आफ्नो तुलिकाद्वारा चित्रकारले सुन्दर दृश्यचित्र तयार पार्दछ । दर्शक-लाई एकसाथ संगीत र कलाको दर्शन हुन्छ । यसै गरी मूर्तिकारले पनि रागहरूको ध्यान-लाई आत्मसात गरी प्रस्तरलाई मूर्त रूप प्रदान गर्न सक्छ । नेपाली मूर्तिकलामा शिव

१४० सि एन ए एस जर्नल, भोलम १४, नं २ (अप्रिल १९८७)

परिवार 'उमा-महेश्वर' फलकमा र मन्दिरका टुंडालहरूमा यस्ता संगीत पक्षका मूर्ति-
हरू देख्न सकिन्छ । तर रागमालाको समूहमा कुंदिएका मूर्तिहरू भने अझसम्म देख्न
पाइएको छैन । यस विषयमा पनि युवा मूर्तिकारहरूको ध्यान जानु आवश्यक ठान्दछु ।

नेपालमा प्राचीनकालदेखि धेरै किसिमका रागहरू लोकप्रिय रहि आएका छन् ।
प्राचीन शैलीका ध्रुपद-धमारदेखि लिएर खयाल शैलीसम्म यहाँ निकै प्रचलित छ । यहाँ-
का भजनगृहहरूमा भजनका पुस्तक (भजन-सफू) हरू प्रशस्त देखा पर्छन् । ती भजन
संग्रहमा अनेकौँ राग र तालका नाम दिइएका हुन्छन् । ती सबैको उल्लेख यहाँ गरिसाध्य
छैन । नेपाली शास्त्रीय संगीतमा त रागहरू लोक प्रिय छन् नै तर हाम्रो नेपाली लोक
संगीतमा समेत रागहरू आफ्नै पनको मौलिकता लिएर लोकप्रिय भई रहेछन् । यस्ता राग-
हरूमा हामी अत्यन्त लोकप्रिय रहेका राग-बसन्त, बहार, मालश्री, विभास, रामकली
जस्ता रागका नाम लिन सक्छौँ । लोक संगीतमा आएर यिनको स्वरूप र ध्यान केही फरक
भए होलान् । तर लोकले आफ्नै रंग र परिवेशमा यिनलाई आफ्नै मौलिकतामा बाँधेर
गाउँदै र बजाउँदै आएका छन् । अझ त्यसमा लोक गीतहरूले आफ्नै छाप छाडेका छन् । सबै
प्रकारका संगीतलाई आत्मसात गर्ने हाम्रो सांस्कृतिक पृष्ठभूमिमा हिन्दूसंगीतबाट प्रभावित
नरहने प्रश्नै उठेन । तर, आजको नेपालको सन्दर्भमा हामीले आफ्नै माटो र ढुकढुकी
खोज्दै त्यसको क्रमिक विकास गर्दै जाने जमर्को गर्ने बेला आई सके जस्तो लाग्छ ।

सन्दर्भ ग्रन्थहरू

- | | |
|------------------------|---|
| आठले, नारायण शास्त्री | सन् १९४३ <u>रागमाला १६ वी शताब्दीका एक महत्वपूर्ण</u>
<u>ग्रन्थ</u> हाथरस, संगीत शास्त्रांक संगीत कार्यालय । |
| कंसाकार, प्रेमबहादुर | २०१९ हाम्रो नाटक परम्परा हिमानी वर्ष १, अंक १
काठमाडौँ, नेपाली साहित्य संस्थान । |
| कृपाल्वानंद, स्वामी | सन् १९७२ <u>पुरूष राग, स्त्रीराग और पुत्र राग</u> राग-
रागिनी अंक हाथरस, संगीत कार्यालय । |
| गर्ग, प्रभूलाल | सन् <u>संगीत सागर</u> हाथरस, संगीत कार्यालय । |
| गोबर्धन, शान्ति | सन् १९८० (सं. सं.) <u>संगीत शास्त्र दर्पण</u> (दुसरीभाग)
इलाहाबाद, रत्नाकर पाठक । |
| जिज्ञासु, चिरञ्जिवीलाल | सन् १९५३ <u>रागसागर झपताल बिलावल अंक</u> हाथरस,
संगीत कार्यालय । |
| ठाकुर, अनन्तला | सन् १९७६ <u>यशोदनन्दकृत रागमाला पटना, काशीप्रसाद</u>
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Research Note

*Husband-Wife Differences in Contraceptive Knowledge
and Use Responses in the Nepal Hills*

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His majesty's Government of Nepal officially sponsored Family Planning and Maternal Child Health Programme in 1968 although the Family Planning Association of Nepal in the non-governmental sector was actively engaged in the area of family planning since the late 1950s. In 1977 a social marketing agency known as the Contraceptive Retail Sales Company came into existence to distribute conventional contraceptives at subsidised rates which now covers most of the country. The Integrated Community Health Services Development Project is another agency established in 1980 to promote family planning services along with the basic health care services. In the non-governmental sector, besides the very active FPAN, there are the Mothers' Club, Youth Club, Nepal Red Cross Society and Ex-Servicemens' Organization which are also involved in birth control programmes (Y.B. Karki 1984).

Despite the untiring efforts made by both governmental and nongovernmental sectors and the involvement of a large amount of expenditure (Rs 652.3 million during the period from 1967-68 to 1983-84) in promoting birth control services the results of the last two nationally representative sample surveys are not very encouraging. The Nepal Fertility Survey conducted in 1976 showed about 22 percent currently married women of reproductive age ever heard of a birth control method and only about 4 percent had ever used a method (Nepal FP/MCH Project 1977). According to the Contraceptive Prevalence Survey of 1981 the corresponding figures were 52 percent and 7 percent (Nepal FP/MCH Project 1983). Given the efforts made in Nepal on the population control front these results are apparently underreported. In both surveys questions on reproductive behaviour were asked of only women since Nepalese socio-cultural norms governing fertility behaviour are largely opposed to the adoption of contraception; the resulting environment may also discourage the reporting of contraceptive information in order to conform to the socially acceptable behaviour.

In this paper, the reliability of data concerning contraceptive behaviour as measured by the consistency between spouses in their reports of contraceptive knowledge and use is considered. The level of response inconsistency is examined using data from one specific survey and subsequently the broader implications of reporting inconsistencies are drawn.

Data

The data for the present analysis comes from questionnaire surveys carried out in 1979 in Gorkha - a rural district and Pokhara town, both of which are in the central mid-hills area of Nepal.¹

Because the survey was carried out to look at the perceived benefits and costs of having children the respondents were selective. Only those wives currently living with their husbands with at least one living child and aged 15-39 years were interviewed. The total of 871 wives (683 rural and 188 urban) and approximately one-third of their husbands (216 rural and 92 urban) were successfully interviewed. Among many aspects of having children the respondents were also asked about their knowledge and use of birth control methods. In a household where both spouses were selected the interview took place separately but simultaneously. These data have been used for the present purposes.

Results

Most persons questioned in the rural sample (85 percent wives and 74 percent husbands) reported never having heard of family planning. In contrast, larger proportions of urban respondents (50 percent of wives and 76 percent of husbands) reported having ever-heard of family planning.

The gap between the proportion of women who have ever-heard of family planning and current contraceptive use is wide in both Nepal Fertility Survey and the present study. The NFS found that only about 2.3 percent of all women interviewed were currently practicing birth control compared to about 22 percent who had ever-heard of family planning. The corresponding figures for the present study are 8 percent and 23 percent.

Of the total 92 husbands in the urban area 29 percent (N=27) but only 11 percent (N=20 out of the total of 188) of wives reported current contraceptive use. The figure for both husbands and wives in the rural area is 7 percent (of the total 216 husbands only 15 of them and out of the total 683 wives only 48 of them). The extent of reluctance to reveal current contraceptive use among the urban wives appears quite considerable, and there is the possibility of reluctance among the rural wives. It may be that husbands were also concealing their contraceptive use. Not only that, the respondents may have also concealed their knowledge of family planning.

The completeness of reporting of both the knowledge of family planning (measured by whether the person questioned has ever-heard of it) and the current contraceptive use was arrived at by applying a technique which is similar to that of Chandra Sekhar and Deming (1976) which has been used for estimating overall underreporting of vital events when two alternative estimates both containing underreporting are present. The present data are suitable for this technique because a wife's reporting of an event can be matched with that of her husband. Therefore, if a husband reports that he has ever-heard of family

planning one can assume that his wife has also ever-heard of it. On this assumption the degree of completeness of the reporting of family planning knowledge and use has been estimated.

An estimate of the total number of respondents 'N' reporting particular information may be obtained as follows:

$$N = HW + N_1 + N_2 + X$$

where HW=information reported by both husbands and wives

N_1 =information reported only by husbands

N_2 =information reported only by wives

X=information not reported by both husbands and wives

If it is assumed that the responses of husband and wife are independent, i.e. that the wife's response is not affected by that of her husband, then 'X' may be estimated as $N_1 N_2 / HW$. In practice, although it is impossible to establish this fact from the data collected in the survey, it might appear likely that the responses would be positively correlated, i.e. the responses of husbands and wives would be likely to be more similar to those of the other spouse than under the assumption of independence since attitudes likely to encourage one spouse to conceal usage might also be expected to influence the other spouse. If this were to be the case then the estimate produced here would give a minimum estimate of the degree of underreporting and the results should be interpreted with this fact in mind.

Substituting the value of 'X' in the above expression the total number of respondents would be estimated as follows:

$$N = HW + N_1 + N_2 + N_1 N_2 / HW \dots \dots \dots (1)$$

which may also be written as

$$\begin{aligned} N &= (HW + N_1)(HW + N_2) / HW \\ &= TH \cdot TW / HW \dots \dots \dots (2) \end{aligned}$$

where TH denotes the number of husbands reporting a piece of information, and TW denotes the number of wives reporting an information.

From rearranging the formula it can be seen that the Chandra Sekhar-Deming technique estimates the completeness of the reporting of the information by husbands as the matched rate of the wives, and estimates of the completeness of the reporting of the same information by wives as the matched rate for the husbands.

$$TH/N = HW/TW \quad \text{and} \quad TW/N = HW/TH$$

This procedure has been used in Table 1 below.

Table 1: Estimating completeness of reporting of ever-heard of family planning in rural area

	Husbands ever-heard of family planning	Husbands never-heard of family planning	Total
Wives ever-heard of family planning	HW=26	$N_2=8$	TW=34
Wives never-heard of family planning	$N_1=30$	$X=9.23^+$	39.23^+
Total	TH=56	17.23^+	$N=73.23^+$

+ Estimate

$$X = N_1 \cdot N_2 / HW$$

Husbands' completeness of reporting is 76.5 percent (56/73.23 or 26/34)

Wives' completeness of reporting is 46.4 percent (34/73.23 or 26/56)

Similarly, other results were obtained which are summarized in Table 2.

Table 2: Completeness of reporting of contraceptive information

	Wives		Husbands	
	Rural	Urban	Rural	Urban
Completeness of reporting of birth control knowledge	46	51	77	90
Completeness of reporting of current contraceptive use	73	63	92	100

As expected, the completeness of the reporting of the knowledge of family planning was higher among the husbands (90 percent urban and 77 percent rural) than their wives (51 percent urban and 46 percent rural - Table 2). Regarding the current contraceptive use the degree of completeness particularly among the wives was much lower. The extent of completeness of reporting of current contraceptive use was 100 percent among the urban husbands but only 92 percent among their rural counterparts. The corresponding figures for wives were 63 percent and 73 percent - Table 2. These completeness rates are the minimum levels as here the partners, both of whom may have concealed their use (which is quite likely) could not be included, because they cannot be traced.

Discussion

These results seriously undermine the validity of family planning information collected by the Nepal Fertility Survey on which several studies² have been based and policies formulated (National Commission on Population 1983). Since husbands were also interviewed in the present study it was possible to evaluate the degree of completeness of reporting of family planning information. One could argue that the level of the wife's knowledge of family planning could not necessarily be the same as that of her husband. Wives in Nepalese society have lower status than their husbands, with little communication between spouses, little contact with the world outside the home (Acharya and Bennett 1981). But regarding the current contraceptive use the respondents, particularly the wives, were not willing to report that they were currently using the contraceptives. Since among the Hindus in Nepal extramarital sex is very uncommon it must be that when husbands were currently contracepting the wives must also be doing so. It must, therefore, be concluded that the Nepalese women do not want to reveal about their sexual behaviour to others. Campbell, et. al. (1979) gave various reasons associated with this problem; and Bennett (1976) did the same with special reference to the Brahman-Chhetri community. One of the main problems is that the whole idea of family planning is a very sensitive matter in Nepalese society particularly among women. It is said that when a woman talks about family planning openly people would think that she is a morally degraded person and her fidelity to her husband is suspect.

Campbell, et.al (1979) argued that one of the reasons for a low level of family planning information revealed by the NFS informants was because their interviewers were males. Interestingly, however, the degree of completeness of reporting of current contraceptive use did not improve although wives in the urban sample of the present study were interviewed by females.

Nepalese society is male dominated, and wives hardly get involved in matters outside the home. Moreover, since revealing of family planning information by wives is likely to cause worries in their minds about the relationship with their husbands they would not talk about it openly unless they get the consent of their husbands. It is also reported by Campbell et.al (1979) that a woman would not want to talk about family planning in the presence of others, particularly the elderly members of the family, to whom they must pay respect. In view of this, every effort was made to interview a person on her or his own. Also the respondents were told that the present study had nothing to do with the Family Planning departments and organizations of His Majesty's Government of Nepal in Kathmandu. Yet the interviewers got the impression that the respondents, particularly the wives would not want to talk about family planning.

On the author's suggestion the FP/MCH project in Kathmandu has considered interviewing about 2000 husbands, that is one-third of the total sample size of about 6000 wives in the next UNFPA assisted Family Planning and Fertility Survey which will be administered early next year.

Hopefully with this large sample size much more useful analysis will be carried out, and a factor will be obtained to calibrate the underreporting of birth control information by wives.

NOTES

1. The data was collected mainly for the author's thesis entitled "Fertility and the Value of Children - A Study of Rural and Urban Populations in Nepal", London School of Economics (London: 1982).
2. Studies that can be cited here are: Rodriguez, German. 'Family Planning Availability and Contraceptive Practice', *International Family Planning Perspectives* (New York: 1978) 4(4). Banister, Judith and Shyam Thapa. *The Population Dynamics of Nepal*. Papers of the East-West Population Institute, No. 78 (Honolulu: East-West Centre, 1981). FP/MCH First Report cited in note 3.

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Research Note

Urban-Rural Differentials in Infant and Child Mortality in Nepal

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Introduction

The place of residence - usually in the urban-rural dichotomy has generally been regarded as an important area where meaningful differentials in infant and child mortality can be observed. The differentials are largely attributed to such factors as the difference in the standards of living, accessibility of public health and medical care facilities and differences in the social and economic status of the families.

In Nepal there have been very few studies on urban-rural differentials in infant and child mortality. The Demographic Sample Surveys of 1974-75, and 1977-76 have revealed that the crude death rates as well as infant mortality rates have been considerably higher in rural than in urban areas (Central Bureau of Statistics, 1978). Based on the Nepal Fertility Survey 1976, Thapa and Retherford also observed substantially lower infant mortality rates in urban than in rural areas (Thapa and Retherford, 1982). The present paper attempts to establish the extent of the rural-urban differentials in infant and child mortality and to determine what are the socio-economic factors associated with the lower level of such mortality in the urban areas of Nepal.

Data Source and Methodology

This study is based on data from the Nepal Fertility Survey 1976 carried out by the Nepal Family Planning and Maternal Child Health Project in collaboration with the World Fertility Survey. The details of the survey methodology and sample design can be found in the Nepal Fertility Survey, First Report (Nepal Family Planning and Maternal Child Health Project, 1977). Although the major objective of the survey was to identify differentials in patterns of fertility and fertility regulation and to clarify factors affecting fertility, the information gathered from the pregnancy histories of ever-married women aged 15-49 also provides the most comprehensive and detailed set of data suitable to examine infant and child mortality by urban-rural residence of the parents.

For the purpose of this study infant mortality is measured as the probability of dying of a cohort of live births before reaching age one, and child mortality (1-4 years of age), in turn, is measured as the probability of dying before age five for those of the cohort of births that survived to age one.

In order to calculate the probabilities of dying between birth and age one and between ages one and five, I excluded from the analysis all children who were born less than five years before the survey to eliminate the effect of truncation. Because of the uncertainty about completeness of reports of births and deaths that occurred in the remote past I excluded from the analysis births that occurred 15 or more years before the survey. In addition, children born more than 15 years before the survey would have a high proportion of those born to younger women; such births are known to be associated with high risk of infant and child deaths and their inclusion would overestimate the past mortality levels. Thus the present analysis includes the cohorts of children born in 1962-71.

Rural-Urban Differentials in Infant and Child Mortality

Table 1 presents selected indicators of infant and child mortality: the probability of dying between birth and age one, and the probability of dying between ages one and five. These measures are presented for rural and urban areas and for birth cohorts of 1962-1966 and 1967-1971. Infant and child mortality obtained for these birth cohorts will enable us to investigate the time trend in the rates. A simple ratio of the rural over urban rates has also been shown to provide a measure of the relative differences in the rates.

Table 1: Infant and Child Mortality by Rural-Urban Residence and Birth Cohorts, 1962-66 and 1967-71

Birth Cohort	Infant Mortality per 1000			Child Mortality per 1000		
	Rural	Urban	R/U	Rural	Urban	R/U
1962-66	178(3622)	119(109)	1.5	119(2977)	42(96)	3.3
1967-71	158(4859)	132(136)	1.2	104(4091)	25(118)	4.2

Note: Figures in parentheses are number of live births for Infant Mortality and number of children that survived to age one year for Child Mortality.

Source: Nepal Fertility Survey 1976.

The differences in rural-urban rates can be attributed not only to socio-economic and environmental effects but also partly to the small size of the urban areas, as the number of births in the urban areas is very small, which may additionally produce some fluctuations in the rates. Therefore, while interpreting the urban rates one needs to be very careful.

It is evident from this table that infant and child mortality rates are substantially higher in rural than in urban areas. As revealed by

the ratios, the differences are more pronounced for child mortality than infant mortality. This could partly be due to the fact that the effects of the socio-economic status of the parents are more important at children's ages of one to four, these ages are free from perinatal and neonatal risks and environmental factors play major roles. On the other hand, the period of infancy is largely free of the worst effects of the social and economic environment.

Examination of the trend in infant and child mortality in urban and rural areas between the two birth cohorts shows that infant mortality in rural areas declined from 178 per 1000 for the 1962-1966 birth cohort to 158 for the 1967-1971 birth cohort. It is, unfortunately, impossible to make any definite statement concerning the trend - and, for that matter, even the true level, of infant and child mortality in the urban areas. There were only 13 and 18 infant deaths and 4 and 3 child deaths recorded in the two birth cohorts, respectively. There are some further problems of data accuracy in particular, that are equally valid for the urban and rural subsamples. It is quite likely that omissions of infant deaths which occurred shortly after birth increase as the time to which they refer increases. This may have artificially lowered the estimates of infant mortality for the earlier cohort, 1962-1966. A similar problem may be envisaged for rural areas, but because of the large sample size the problem may not be as critical as in the case of urban areas. The problem of omission of deaths may be less serious in the case of child mortality. According to the Nepalese custom, the child has to undergo several ceremonies during its childhood such as the day when solid food is first introduced (between 5 and 7 months), and the first and the second birthday. A child who dies after such ceremonies have been performed will have gained social and emotional values in the family and will thus be less likely to be omitted.

Socio-Economic Determinants of Infant and Child Mortality in Urban Areas of Nepal

Variations in socio-economic characteristics within urban areas may be expected to produce differences in mortality. Because of the limited size of the urban sample, it is not possible to examine the time trend in infant and child mortality. For the same reason we can include only a limited number of socio-economic variables in the analysis. In Table 2 the infant and child mortality rates in urban areas by selected socio-economic factors are set out.

Region of Residence

It is to be noted that the capital city of Nepal and the other two towns of the Kathmandu Valley are included in the hill areas. With this in mind it does not come as a surprise that urban infant and child mortality rates are lower in the hills than in the Terai (95 per 1000 as against 184 for infant mortality and 28 as against 42 for child mortality, respectively).

Childhood Residence of Mother and Father

Urban infant and child mortality rates are substantially lower among children whose mothers had spent their childhood in a town rather than in a village (56 per 1000 as against 198 for infant mortality and 26 as against 41 for child mortality). Similarly, the children of fathers who were brought up in a town experience lower infant and child mortality than those whose fathers were brought up in a village (110 per 1000 as against 154 for infant mortality and 22 as against 52 for child mortality).

Table 2: *Infant and Child Mortality by Region of Residence, Childhood Residence and Education of Mother and Father in Urban Nepal 1962-71.*

Characteristics	Infant Mortality per 1000	Child Mortality per 1000
Region of Residence		
1. Terai	184(87)	42(71)
2. Hill	95(158)	28(143)
Childhood Residence of Mother		
1. Village	198(121)	41(97)
2. Town	56(124)	26(117)
Childhood Residence of Father		
1. Village	154(91)	52(77)
2. Town	110(154)	22(137)
Education of Mother		
1. No Education	143(168)	35(144)
2. Some Education	91(77)	29(70)
Education of Father		
1. No Education	186(70)	35(57)
2. Some Education	103(175)	32(157)

Note: Figures in parentheses are number of live births for infant mortality and number of children that survived to age one year for child mortality.

Source: Nepal Fertility Survey 1976

The most plausible reason for this pattern is that those who spent their childhood in a town are likely to be better educated. In addition to this, these parents may be more aware of the health services available and are likely to be more receptive to modern medicine. On the other hand, those who came to the urban areas from villages later in life may

still preserve their traditional attitudes towards health, personal hygiene, child care habits and most importantly, the concept of illness and ways to cure it. Also, some of the rural to urban migrants may have come in search of casual or other jobs and may, therefore, belong to the poorer stratum of the society.

Education of Mother and Father

Urban infant and child mortality varies by educational attainment of parents. Because of the small sample size it was necessary to categorize education into two groups only: no education and some education. The infant mortality rate is much higher (at 143 per 1000) among uneducated mothers compared to 91 among educated mothers. It is also apparent that differentials in infant mortality exist by education of fathers: the infant mortality rate of 186 per 1000 for fathers who had no education drops to 103 for those who had some education. Obviously the availability of health services in urban areas is not the only factor that reduces infant mortality. Equally important factor is the proper utilization of services. Those who are educated are well aware of the services, the maternal and child health services in particular, and are able to make use of them when they are needed.

Differentials in child mortality also exist by education of mothers and fathers; mothers and fathers with some education experienced lower mortality among their children than their counterparts with no education. However, the differences are not as marked as in the case of infant mortality, though this may be due to the small numbers involved; there were only two and five deaths recorded among the children of fathers with no education and some education, respectively.

Summary

It has been generally observed that infant and child mortality in almost every developing country is lower in urban than rural areas. There are several reasons behind this difference. In the process of the overall development of the country, development of public health services has often been one of the priority areas. At the outset, most public health programmes tend to be concentrated in urban areas because these are easily accessible and only in the later stages do public health programmes reach the rural areas as well. This has been the trend in most, though not all, developing countries. There have been notable exceptions, in particular in some of the less populous countries, as in Sri Lanka, Malaysia, and Kerala in India.

There are still many remote areas in Nepal not covered by basic health services. Even where a health centre does exist it may be unattended or the services rendered may be inadequate for a variety of reasons. Therefore, the inequality in the availability of health services between rural and urban areas can have significant impact on infant and child mortality. In addition, the lack of knowledge, widespread poverty and traditional beliefs aggravate the health problems in

the rural areas. The same factors may cause underutilization of the available health services.

It has been shown in this paper that infant and child mortality measured as the probability of dying between birth and age one, and the probability of dying between ages one and five, are substantially lower in urban than in rural areas of Nepal. Because of the limited urban subsample it is virtually impossible to make any conclusion about the trends in infant and child mortality over time. To sum up, a lower infant and child mortality in urban areas was observed among children born to: parents whose current residence was in the hills; mothers whose childhood residence was in a town; fathers whose childhood residence was in a town; mothers who had some education; and fathers who had some education. It is also possible that parents' childhood residence and education may be related. The limited size of the urban sample restricted further breakdown of infant mortality by characteristics of the parents. Although education and childhood residence have been found to be important in reducing infant and child mortality in the urban areas of Nepal, it is not possible to determine their independent effect. This obviously calls for further research where a large urban sample would enable detailed analysis of the determinants of infant and child mortality in the urban areas of Nepal.

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The Sherpas Transformed: Social Change in a Buddhist Society of Nepal. 1984. Christoph Von Füller-Haimendorf XIII+188 pages, Bibliography and Index. Sterling Publishers Pvt. Ltd. New Delhi Price NC Rs. 150.

The anthropological research among Sherpas begun almost three decades ago by Füller-Haimendorf was undertaken in 1953 in the Khumbu area of northeast Nepal. This research work led to the birth of a book entitled *The Sherpas of Nepal: Buddhist Highlanders* published in 1964, where the author has described socio-cultural and economic life of this trading society in detail. Subsequently, the author visited the area briefly in 1971, and he outlined some of the changes in his book *Himalayan Traders* in 1975. He revisited the area in 1983, and he has presented the account of changes occurring in the area during the years 1971 to 1983 in his book *The Sherpas Transformed: Social Change in a Buddhist Society of Nepal* published in 1984 (henceforth *The Sherpas Transformed*).

The Sherpas Transformed, divided into nine chapters, gives a good account of changes brought about by tourism and mountaineering expedition in a Sherpa region covering Khumbu, Rolwaling and Tashi Gompa of the northeastern Nepal. Enumerating households of the area covering the period between the years 1953 to 1983, the author has vividly shown the extent of revolutionary changes occurred in the traditional, homogeneous, Buddhist society of Nepal. Presented here are the accounts of changes explained by the author in different aspects of the Sherpa's life in the Khumbu region of northeastern Nepal.

In the first chapter, the three types of settlements: main village, Gunsu (winter settlement) and Yersa (Summer settlement) are described together with the scattered pattern of housing built mainly of local resources of rocks, earth and timbers. A Gumpa (a buddhist temple) and a Mani (a giant prayer wheel decorated with frescoes with a sacred character) are the common features of a Sherpa village. Villagers' general interests on religious matters are usually reflected in the construction of a Kani (a free colorful standing gate). Its maintenance is the responsibility of the villagers, but less efforts and resources are spent on religious enterprises these days. The layout, floor plan and its uses of a typical Sherpa house is also nicely described. Among the changes which occurred in the Sherpa village, the author enumerates that Khumbu is characterized with the conspicuously erected *Dharmasālas* or lodges mainly intended for tourists which were rare in the Sherpa village in 1953. Nowadays, the houses are in ruins in the Gunsu settlement. Previously, in the Sherpa society, the poor people owned single-storeyed house and the wealthier people double-storeyed ones. These days, majority of the houses are double-storeyed and owned even by the landless, who work for tourists to earn cash and are in a position to abandon old single-storeyed houses and build a new ones.

The economy of the Sherpas has undergone revolutionary changes since 1951. However, their agricultural operation recurs at a standstill because of the absence of able-bodied people in the village. Potato, exported to Tibet in the 1950s, has been exported to mid-hill and the Terai in the south. Magars have replaced the Khampas to empty latrine to apply in the field in 1983. Previously, economic activity assumed the characteristics of a social entertainment (singing, gossiping and joking while performing agricultural operations). Nowadays, these activities are absent as the young people are busy with tourists.

The Sherpas previously linked with trades with Tibet used to import salt and wool to Nepal and export rice, wheat, millet and maize shoulder-carried from the mid-hill to Tibet. However, this commercial link has broken completely in 1959, when China occupied Tibet. After some years, these frontiers were reopened. But the irony was that the Sherpas had to dispose their goods at the Chinese trade depot in Dingri with no bargain. This was a great shock ever experienced by the Sherpa community. However, this loss from trade was made up by the emergence of tourism and Himalayan mountaineering expedition.

In the past, potato was the mainstay of their diet. Rice was usually eaten by the Sherpas on the feasts and festivals. These days, rice has been an ordinary item of diet and large quantities of rice are purchased at weekly market. Similarly, the author notes that woollen raw materials from Tibet have been replaced by cotton fabric from Kathmandu and the brick tea from Tibet by tea from India. All the changes that have been discussed above are brought about in the Khumbu regions mainly by the development of tourism.

In Chapter Two, the author maintains that a Sherpa society in Solukhumbu was homogeneous unstratified and egalitarian in nature. It became heterogeneous only after the settlement of the Khampas from Tibet. The equality of status has disappeared in the society and Sherpas have become aware of status differences.

Discussing the sex, marriage patterns, and family life in Chapter Three, the author states that "sexual relationships are morally neutral provided those involved are neither bound by vows of celibacy nor by ties of marriage" (p.35). The parents usually connive at their daughter's amorous adventures especially at feasts, dances, and fields. This society is very liberal about sexual activities. The extent of liberality can be guessed by the statement, "No disgrace is allowed to giving birth to an illegitimate child, nor does it materially affect a girl's chances of a satisfactory marriage" (p.36). The author has also eloquently described various stages of marriage such as *sodne* (proposal to ask for marriage), *zendi* (full wedding rites) and *Rit* (in lieu of *zendi*). Polyandrous marriage, which was considered to be the most desirable in the 1950s has been reducing in 1983, and polygyny has become very common among those who are involved in tourism. They usually have one wife in Kathmandu and the other in Khumbu. The husband and wife relationships in a Sherpa family is based on the principles of equals. They show

tolerance and love to each other. The marriage can be dissolved easily. The author points out that "sexual relations are emotionally not highly charged, and that Sherpas are not prone to jealousy."

In the description of village organization in Chapter Four, it is said that the institution of *Naua* and *Shingo Naua* appointed by the villagers to control village land and to preserve village forests respectively and many other organizations have not been existing at all. Many of the old traditions have been broken especially after the introduction of Panchayat System. The land revenue collected by *Pembu* has been performed by the Land Revenue Office. The *de facto* autonomy enjoyed by Khumbu is no more there. Even then the old traditions have been replaced by the Panchayat "the manner of reaching decisions and dealing with disputes has changed little and the panchayat members act like the previous *Pembu* and *Naua*" (p. 57). The village Panchayat has taken over the functions of the traditional system of village government.

The villager's spirit to protect the community wealth has declined tremendously. The Sherpas do not think that the forest belong to them specially after the establishment of the Sagarmatha National Park near Khumbu. The mountaineering team cut firewood along the trail and local traders graze pony for 2-3 month resulting in a deforestation at the Khumbu region. The problem of deforestation has been exacerbated by Tibetan refugees in the years after 1959. Besides deforestation is psychological in nature, where Sherpas cut down a large number of timbers to build houses. In this way, forests have disappeared in the Khumbu region. Also, goat husbandry, an easy way to add to their income, is no more common due to shortage of grazing land. Even the cattle are not permitted to graze inside the Park area. The pheasants, who legally protected birds, destroy early potato shoot at the *Gunsa* settlement. They endanger the crops in fields adjoining the forests. It is very sad to observe that the indigeneous systems of controlling and preserving the Khumbu forest have been destroyed completely by the establishment of the Park in the area. Similarly, a school was a novel feature in the area then. The literate Sherpas could read and write only Tibetan script. Now they are required to do so in Nepali, too. Besides HMG, the Himalayan Trust is helping to run the high school. The Trust provides free books to students above Grade IV.

The author has given a detailed account of change and impact brought about by tourism in the Khumbu region. More than half of the families of the village are involved in tourism as porter, guide, *sirdar* and hotel-keeper. The position of *sirdar* has been a source of influence and economic power in the area. The *sirdar*, besides his wage, takes a commission on the wages of non-Sherpa porters too. They have become conscious, too. They have formed an association, called Sagarmatha Sherpa Sewa Kendra for the welfare of the Sherpas at distress. The tourist-industry has brought change in the Sherpa's standard of living in terms of materials, introduction of window pane, iron sheet as roofing material. Their diet has changed from potato and buckwheat to rice,

sugar, fresh meat. Some have even luxurious house and their clothing habit has changed to down padded jacket, sheep-skin coat, etc. The number of hotel has increased from none in 1953 to 15 in 1983. And the town of Namche Bazar has changed tremendously (Nowadays, all the tourist activities are controlled from the Kathmandu base). In addition to some visible changes, tourism has brought about some negative impact on life-style of the Sherpas, too. The men joined the tourists with high income leaving their women in Khumbu and burdened them with rearing of children, farm work, etc. The women appear to be the losers, being deprived of security and their social position companionship of their husbands. Tourism has brought, to some extent, the break-up of many families. Also, many Sherpa women have been the victim of their husbands' sexual adventure with their female clients and the psychological effect caused by this is immeasurable. The Sherpas are very commercialized, and do not have time to be involved in extending hospitality and developing relationship. The absence of able-bodied Sherpas on mountaineering has affected family life more deeply. The young men return only during the monsoon to celebrate Dumje festivals. The young girls are deprived of young men in village. The impact of fatal accident on families is irreparable. The number of fatal accidents since 1953 is about 116 men, who are believed to have perished in mountains. The total impact of tourism on Sherpa is yet to be investigated. All these statistics on fatal accident raises some problem about the justification of endangering the lives of so many Sherpas in enterprises" involved seriously in giving "pleasure and satisfaction to a few foreign mountaineers." The author mentions:

Anyone who has experienced the shock and distress engulfing a Sherpa village when the news of a major accident reaches the families of the victims must wish that European, American and Japanese mountaineers could find ways of proving their courage and endurance without unnecessarily putting at risk so many Sherpas in the prime of their life (p.75).

The Sherpas are very reluctant to accept the post of a teacher because they earn more from tourism and mountaineering expedition. The author explains that the sherpa population in the Khumbu region will decline in future as the births are outnumbered by deaths, Sherpas are migrating out of Khumbu there occurs continued mortality on climbing expedition and economic importance declines in the Sherpa villages of this region.

In Chapter Six 'Buddist Institutions and Practices', the author discuss the evolution of *Gompa* in Khumbu. He says that *Thawa*, Abbot, monk and nuns are from rich families. But the number of monks has dropped as they had returned to secular life in order to earn high wages paid by mountaineering expeditions. There is a decline in religious dedication and scholarships as well as there are opportunities for young people away from Khumbu. The *Osho* (to protect village) rituals have been replaced by the Panchayat system. *Nyungne* (cleansing the worshippers of sin and the corresponding gain of merit), *Dumje* (merry making

festivals to drive out hostile spirit) are still performed. And the hospitality is thrown to earn religious merit, together with the purpose of gaining prestige in the village. Other festivals are also held, *Dumje* in public temple and the *Mani-Rimdu* in monastery.

Fürer-Haimendrof has described 'Mortality and Social Values' in the Seventh Chapter of the book. He has eloquently described both the meritorious conduct and sinful act. The Sherpas believe that good work outweigh minor sins. The Sherpas do not, anymore, show religious fervor because they have earned money by work for tourists and mountaineering expedition. Inscription of religious scripture on rock was very common, but not any more. The Sherpa's values are gradually disappearing. They compete for *sirdarship* which has created conflict in village. They moved to trade from agriculture, and from trade to tourist industry. Tourism has forced many customs to disappear in Khumbu village such as:

The generosity and hospitality so characteristic of the settled farmer is unlikely to survive in the peripatetic existence of a tourist guide or mountaineering porter...two generations ago Sherpa social life was comparable to that of medieval Europe while today a village such as Namche Bazar resembles in many respects minor tourists resorts in the Australian or Swiss Alps" (p.114).

The author has pointed out how the Rolwaling Sherpas have occasioned change in their social and economic life. The unknown things in 1953 such as leather Jacket, sleeping bag, and transistor are very common these days. The poor families rival with the rich in the possession of yak and land. The poor families also sponsor *Gompa* festivals and religious rites. The political power has shifted from older generation to younger men with tourist and mountaineering experience. They earn money from tourism. As a result the older people, these days, devote their life on religious activities. Even the school drop-outs are seen to have joined tourism.

In the last chapter of the book, the author describes "The Buddhist Community of Tashi Gompa" with the description of how Tashi Gompa was built by lamas and nuns. Its economic base is the endowment from the devotees, donation in the form of land and so on. He advocates that the Buddhist monastery life is basically egalitarian, where all nuns and Gompa officials have an equal chance of attaining positions of responsibility at the monastery. He has enumerated 27 houses with the description of nuns, who entered Tashi Gompa on their own as young unmarried girls. The reason to join nunnery, as described by the author is that

One of the basic motivations for such a decision is undoubtedly the conviction deeply ingrained in Buddhist ideology that the attainment of religious merit is a part of future good fortune through favorable reincarnations as well as peace and contentment in this life.

According to the author, the Sherpas at the Khumbu region have undergone a great change in their socio-cultural milieu since 1953. However, the author has not analyzed whether these changes are from only tourist industry or from other development strategies as well such as education, communication, agriculture development, remote area development, health etc. The author has not mentioned anything on the change in nutritional status of people in general after they have started eating rice. Nor does he say anything about the quality of life experienced by these people in 1983. Nevertheless, the book contains information brilliantly placed together by a field anthropologist *par excellence* like Fűrler Haimendorf. Thus the book *The Sherpas Transformed* covering a period of 30 years, is a well-documented, field research which is worth-reading by students of change in Nepali culture and society.

- Bishnu Bhandari